



DOCTOR OF CLINICAL PSYCHOLOGY (DCLINPSY)

Doctorate in Clinical Psychology: Main Research Portfolio

1) Literature Review: Psycho-social risk factors for Generalised Anxiety Disorder: an exploratory literature review of current knowledge; 2) Service Improvement Project: Session-by-session outcome monitoring in CAMHS: Clinicians' beliefs; 3) Main Research Project: Mindfulness-based Cognitive Therapy versus self-help for students with clinical perfectionism: a pilot randomised study.

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Research Portfolio Submitted in Part Fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology Volume 1 of 1

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Doctorate in Clinical Psychology

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May, 2014

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Abstracts

Mindfulness-Based Cognitive Therapy versus self-help for students with clinical perfectionism: A pilot randomised study

Objective: This pilot study compared a mindfulness-based cognitive therapy (MBCT) intervention with a self-help guide based on a cognitive behaviour therapy (CBT) approach for students with clinical perfectionism. *Method:* Participants were randomised to either MBCT or self-help. Questionnaires were completed at baseline, eight weeks later (the primary outcome point, corresponding to the end of MBCT) and at ten-week follow-up. *Results:* Post-intervention intention-to-treat (ITT) analyses identified that MBCT participants ($n = 28$) had significantly lower levels of unhealthy perfectionism and stress than self-help participants ($n = 32$). There was also significant MBCT superiority for changes in unhelpful beliefs about emotions, rumination, mindfulness, self-compassion and decentering. At ten-week follow-up, effects were maintained in the MBCT group and both ITT and completer (per-protocol) analyses showed superior MBCT outcomes for unhealthy perfectionism and daily impairment caused by perfectionism. Mediation analysis showed that pre-post changes in self-compassion mediated the group differences in pre-post changes in clinical perfectionism. *Conclusions:* MBCT is a promising intervention for students with clinical perfectionism, which may result in larger improvements than self-help. The findings require replication with a larger sample.

Session-by-session outcome monitoring in CAMHS: Clinicians beliefs

The CYP-IAPT programme emphasises the meaningful contribution session-by-session routine outcome monitoring (ROM) can make to clinical practice and its importance in highlighting services' effectiveness. Two studies on issues related to the implementation of ROM in children's services were conducted. Study one was qualitative; twelve CAMHS professionals participated in focus groups. Themes identified included the idea that ROM could provide objectivity, could be collaborative and empowering. Concerns included how measures may adversely influence therapeutic sessions and how the information may be used by the service. These themes were used to develop a questionnaire about professional's experience of and views on session-by-session ROM. In study two, 59 professionals from four CAMHS teams completed the questionnaire. It was found that only 6.8% reported "almost always" utilising session-by-session ROM. Detailed analysis of questionnaire responses suggested two factors reflecting the perceived negative and positive impact of session-by-session ROM. It was found that clinicians who

currently use session-by-session ROM hold stronger positive and negative beliefs than clinicians who do not. This study suggests that session-by-session ROM is not currently routine practice within CAMHS and highlights the importance of considering how this practice can be best implemented within this setting with reference to clinician attitudes.

Psycho-social risk factors for Generalised Anxiety Disorder: An exploratory literature review of current knowledge

Research around worry and its central role within Generalised Anxiety Disorder (GAD) has primarily focused on characteristics and treatment, with little investigation into factors involved in its development. The current paper reviews literature to explore our existing understanding of risk factors involved in the aetiology of worry and GAD and briefly reviews how well current cognitive models account for identified aetiological factors. Collectively, current cognitive models vary in their focus on, and explanation of, aetiological factors of worry and GAD and require further theoretical development. Further research within this field focused on the role of parenting and insecure attachment styles, life events and the course of symptoms across gender and the lifespan will be beneficial.

Psycho-social risk factors for Generalised Anxiety Disorder: An Exploratory literature review of current knowledge

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This report is targeted towards Clinical Psychology Review, a journal which publishes articles which contribute substantive reviews of topics relevant to clinical psychology (see Appendix A for author guidelines and Appendix B for Highlights in line with these).

Abstract

Research around worry and its central role within Generalised Anxiety Disorder (GAD) has primarily focused on characteristics and treatment, with little investigation into factors involved in its development. The current paper reviews literature to explore our existing understanding of risk factors involved in the aetiology of worry and GAD and briefly reviews how well current cognitive models account for identified aetiological factors. Collectively, current cognitive models vary in their focus on, and explanation of, aetiological factors of worry and GAD and require further theoretical development. Further research within this field focused on the role of parenting and insecure attachment styles, life events and the course of symptoms across gender and the lifespan will be beneficial.

Key words: Generalised Anxiety Disorder, Worry, Aetiology, Risk factors

Introduction

Worry, GAD and its impact

GAD is a psychological difficulty characterised by excessive, uncontrollable worry and anxiety. Worry, often seen as GAD's central feature, is defined as an anticipatory cognitive process (Vasey, Crnic, & Carter, 1994), which in and of itself is not necessarily negative. For example, researchers suggest worry can help individuals problem-solve, avoid negative events and prepare for the worst (Watkins, 2008) and is found to be common across the lifespan (Carter, Wittchen, Pfister, & Kessler, 2001; Muris, Meesters, Merckelbach, Sermon, & Zwakhalen, 1998). However, this process can cause clinical concern when focusing on negative thoughts around possible outcomes and their consequences (Vasey et al., 1994) increases in frequency and severity, impacting on an individual's functioning. A GAD diagnosis is based on the widely used criteria set out by the Diagnostic and Statistical Manual of Mental Disorders (DSM), with the American Psychiatric Association (2013) recently releasing its fifth edition (DSM-V).

Estimated prevalence rates of GAD among children and adolescents range between 0.16 and 8.8% (Cartwright-Hatton, McNicol, & Doubleday, 2006), while adult studies estimate 12-month prevalence rates of approximately 2% to 6% in community populations (Hunt, Issakidis, & Andrews, 2002; Lieb, Becker, & Altamura, 2005). Kessler, Chiu, Demler, Merikangas, and Walters (2005) further report lifetime prevalence rates of 5.7%, and GAD is often found to be the most common anxiety disorder later in life (Bryant, Jackson, & Ames, 2008). After depression, GAD is the most frequent (up to 10%) psychological difficulty within primary care, with research suggesting it leads to considerable impairment, disability, and reduced quality of life, alongside high utilisation of healthcare resources (see Lieb et al., 2005). The prevalence and distress associated with GAD highlight the importance of understanding this difficulty.

Conceptualisation of GAD

GAD was first introduced in the third edition of the DSM (DSM-III) (American Psychiatric Association, 1980), and has been subject to changes in diagnostic criteria in subsequent revisions (American Psychiatric Association, 1987, 1994, 2000, 2013). These changes have predominantly focused on the duration of difficulties, definitions of excessive worrying, and reductions in the type and number

of associated symptoms (Lieb et al., 2005). Furthermore, criteria vary between diagnostic manuals, with the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) (World Health Organization, 1992) endorsing a much wider range of associated symptomatology and not requiring difficulties controlling worry.

Current DSM-V GAD criteria requires that individuals experience (1) excessive worry and anxiety about a range of events or situations for at least six months, (2) significant difficulty controlling the worry, (3) three or more symptoms (restlessness/feeling on edge, easily fatigued, difficulty concentrating, irritability, muscle tension, sleep difficulties), (4) clinically significant distress or impairment as a result, and (5) not having this experience due to another Axis I psychological difficulty, substance misuse or general medical condition. To reflect the developmental continuum, the GAD diagnosis was extended to children and adolescents in DSM-IV-TR, with one associated symptom required, rather than three as in adults.

Psychological Models of GAD

Alongside research around the characteristics and prevalence, a range of psychological models offer theoretical conceptualisations of the development, maintenance and treatment of this difficulty (Behar, DiMarco, Hekler, Mohlman, & Staples, 2009). The Avoidance Model of Worry and GAD (AMW) (Borkovec, Alcaine, & Behar, 2004) proposes that worry is an attempt to generate ways to prevent bad outcomes from happening and/or prepare for their occurrence. Within this model, worry becomes negatively reinforced as less distressing thoughts replace catastrophic images, inhibiting aspects of somatic and emotional activation (theorised to prevent emotional processing of fear). Worry is further reinforced through positive beliefs, which are strengthened when negative outcomes do not occur or are well managed. The Intolerance of Uncertainty model (IoU) (Dugas, Gagnon, Ladouceur, & Freeston, 1998; Dugas & Robichaud, 2007) proposes that IoU, alongside beliefs that worry can help you cope or prevent feared events from happening, sets off a cycle of excessive worry, negative problem orientation and cognitive avoidance.

Also recognising the role of positive beliefs about worry, the Metacognitive Model (Wells, 1999) asserts that individuals with GAD hold positive metacognitive beliefs leading to the generation of multiple possible outcomes (type 1 worry). Wells suggests, however, that the activation of concurrent negative metacognitive beliefs (type 2 worry), focused on the uncontrollability and dangers of worry, is what leads to excessive worry, avoidance, reassurance seeking, and thought-control strategies. In the Emotion Dysregulation Model, Mennin, Turk, Heimberg, and Carmin (2004) focus on the impact, experience and beliefs about emotions within GAD. They suggest that individuals with GAD experience more intense emotions, have a poorer understanding and more negative attitudes towards their emotions, and find emotion regulation more difficult. Furthermore, the Acceptance-based Model of GAD (Roemer & Orsillo, 2002) proposes that individuals with GAD have negative reactions to internal experiences, alongside beliefs that these reactions are permanent. Roemer and Orsillo hypothesise that this leads to experiential avoidance and behavioural restriction, which although reduces distress in the short term, results in increased distress over time. The development of varying theoretical models has important consequences for interventions with GAD and the differing emphasis placed on proposed mechanisms of change. It is therefore important to consider these models in relation to our existing knowledge and investigate their explanatory power with regard to onset and development of GAD.

Summary

Research around worry and its central role within GAD has primarily focused on characteristics and treatment (Hudson & Rapee, 2004), with little investigation into factors involved in its development. Although there has been increased interest in the developmental process of these difficulties, the considerable changes in diagnostic criteria over time and between manuals has led to difficulties in progressing this understanding. Research looking at GAD across the lifespan has, individually within each population, called for future research to identify etiological and maintaining factors (Behar et al., 2009; Hunt, Wisocki, & Roger, 2009; Kertz & Woodruff-Borden, 2011).

This paper, therefore, firstly aims to review literature on our current knowledge of GAD to try to understand the vulnerability and risk factors involved in its aetiology. Current theoretical models will then be briefly reviewed with the aim of considering

how well they account for the aetiological factors previously identified. Conclusions about specific risk factors in relation to GAD generally and more specific life stages will then be discussed, alongside suggestions for future research.

Method

Given that literature in this area is still developing, this exploratory review will incorporate research based on GAD criteria across diagnostic manuals (DSM and ICD) and include studies on the basis of changing criteria over time (e.g. DSM-III – DSM-IV). Where possible, the review will also aim to include studies from across the lifespan to help tease out any common themes across age groups or whether risk factors change with life stage.

The terms “worry” and “generalised anxiety disorder” (including abbreviation GAD), alongside “development” and “onset” were key search terms utilised across databases such as PsycInfo, PubMed, and Scopus. Articles were reviewed for relevance and life stage of focus. To ensure all relevant articles were found, the terms “children”, “adults” and “older adults” were also used alongside “worry” and “GAD”. The search included articles from the earliest possible date until September 2013.

Demographic Factors

Gender

Across all anxiety disorders prevalence data demonstrates clear sex differences (Bijl, Ravelli, & Van Zessen, 1998; Lewinsohn, Gotlib, Lewinsohn, Seeley, & Allen, 1998). Specifically, females generally display higher levels of anxiety than males. Research in GAD suggests similar gender differences.

Childhood studies suggest that higher levels of worry, more specific worries, and more physical symptoms are reported by girls compared to boys (Chorpita, Tracey, Brown, Collica, & Barlow, 1997; Muris, Meesters, & Gobel, 2001), and that mothers perceive that their daughters worry more than their sons (Gottlieb & Bronstein, 1996). Prevalence figures of childhood GAD also highlights gender differences. For example, based on a non-clinical sample of children aged 8 – 13 years (n = 193), Muris et al. (1998) report that 9.0% of girls met GAD DSM-III-R criteria in

comparison with 3.8% of boys. Recent longitudinal prospective studies across adolescence also suggest that girls have more anxiety symptoms than boys (Van Oort, Greaves-Lord, Verhulst, Ormel, & Huizink, 2009), and that, over time, GAD symptoms increase for girls and decrease for boys (Hale, Raaijmakers, Muris, Van Hoof, & Meeus, 2008).

Within adult literature, Carter et al. (2001) studied the one-year prevalence of GAD in German 18 – 65 year olds ($n = 4181$), finding that women displayed higher rates of worrying (10%) and GAD (2.7%) in comparison with men (5.7% and 1% retrospectively). This is supported by consistent findings that GAD prevalence is higher (approximately double) in females than in males in both clinical (Woodman, Noyes, Black, Schlosser, & Yagla, 1999; Yonkers, Warshaw, Massion, & Keller, 1996) and community samples (Bijl et al., 1998; Grant et al., 2005; Kessler et al., 2002). For example, Grant et al. (2005) found the lifetime prevalence rates for women in a US community sample ($n = 43,093$) were 5.4% compared to 2.8% for men, and that being female increased risk of GAD onset.

Summary

These results consistently suggest that, as children and adults, females have an increased risk of developing GAD compared with males. The findings of recent longitudinal prospective studies have begun to explore patterns in GAD symptomatology across time by both sex and age (see below), suggesting interesting findings in which adolescent girls symptoms increase over time, while boys symptoms decrease (Hale et al., 2008). Further exploration of the developmental course of GAD symptomatology across gender and the lifespan into middle and later adulthood would provide further information to build on these initial results.

Age

Early Onset

Childhood research suggests older children experience more symptoms of worry and GAD than younger children (Kertz & Woodruff-Borden, 2011). For example, Vasey et al. (1994) showed that, in a sample of 5 – 12 year olds, older children demonstrated more worry variety and an increased ability to elaborate on the

outcomes and consequences of worries. Furthermore, in developing an adapted version of the Penn State Worry Questionnaire, Chorpita et al. (1997) found that older children (ages 12 – 18 years) scored higher than younger children (ages 6 – 11 years). Although these cross-sectional designs can tell us about the frequency and factors associated with worry and GAD, as measurements are taken at a particular point in time information about causal relationships is limited.

Building on this research, two recent longitudinal prospective studies have sought to further investigate the developmental course of anxiety during adolescence. Firstly, Hale et al. (2008) assessed groups of 'early' (n = 939; average age of 12 years) and 'middle' (n = 379; average age of 16 years) aged adolescents across a five-year period for a range of anxiety difficulties, including GAD, using the Screen for Child Anxiety Related Emotional Disorders, which assesses difficulties in relation to DSM-IV-TR anxiety disorders (Birmaher et al., 1997). These results suggested that, in comparison with early adolescent girls and adolescent boys in both age groups, middle adolescent girls displayed significantly higher initial GAD symptoms. Observing the course of these symptoms over time, the study found that boys in both age groups showed significant decreases in GAD symptoms, while early adolescent girls displayed a significant increase and middle adolescent girls maintained their initial (higher) level.

In a similarly designed study with children initially aged 10 – 12 years in the Netherlands (n = 2220), Van Oort et al. (2009) found that GAD scores on the Revised Child Anxiety and Depression Scale (Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000), a self-report measure relating to DSM-IV mood and anxiety disorders, reduced during early adolescence and then increased from middle adolescence. When investigating potential gender differences, they found that the course of symptoms was similar for boys and girls, however, girls showed higher levels of anxiety. In line with these findings, a longitudinal prevalence study (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003) with children aged 9 – 16 years (n = 1,420), using the Child and Adolescent Psychiatric Assessment to assess DSM-IV disorders, showed that the three-month prevalence of GAD dropped to its lowest level at age 12 to 13, and then rose slowly.

Although potentially limited by use of adolescent self-report and a community sample that may differ to clinical populations, these results begin to add to our knowledge on both age and gender differences in GAD. Prospective studies add to previous research noting a general increase in GAD during adolescence, however, while Hale et al.'s results suggest that this increase primarily applies to adolescent girls, Van Oort et al.'s findings do not support a gender difference. This highlights the need for further research with the use of consistent measures relating to DSM-V classifications of GAD to aid comparison, as these conflicting findings may be due to use of a range of self-report or interviewer-based measures, relating to differing DSM categorisations of GAD.

Later Onset

Although Lieb et al.'s (2005) epidemiological review suggested GAD can develop at any point in life (based on retrospective report); the authors argue that GAD, diagnosed using DSM-IV criteria, is actually relatively rare in the first two decades of life. Their results indicate that GAD is most common among those aged 55 or above, while Grant et al.'s (2005) national epidemiological survey of US adults over aged 18 (n = 43,093) concludes that being middle-aged (defined as 30 – 64 years) increases risk of GAD and reports an average age of onset as 32.7 years. Similarly, Carter et al.'s (2001) report of the one-year prevalence of DSM-IV GAD in German 18 to 65-year olds (n = 4,181) suggested that 35 to 65-year-olds were significantly more likely than younger adults to fulfil criteria of experiencing uncontrollable worry for six months. Furthermore, the World Health Organizations examination of data from four community surveys (Kessler et al., 2002) with adults aged over 18, reports meaningful risk of onset beginning in the teens, with risk increasing in a relatively linear fashion through the mid-fifties.

In a further prospective study investigating the course of GAD across a 20-year period with Swiss adults aged 20 – 21 to 40 – 41 years (n = 591), Angst, Gamma, Baldwin, Ajdacic-Gross, and Rössler (2009) found that GAD annual incidence increased considerably between these two age periods. Reported retrospectively, average age of onset of GAD symptoms was 15.6 years, while in 75% of cases onset occurred before age 20. Further studies investigating either the age of onset or long-term course of GAD report retrospective average age of onsets at 21.3 years (n = 179) (Bruce et al., 2005), 22.8 years (n = 25) (Thyer & et al., 1985), and

25.6 years ($n = 65$) (Rubio & López-Ibor, 2007). In a review of the nature and course of GAD, Wittchen and Hoyer (2001) concluded that the likelihood of receiving a GAD diagnosis increased significantly with age (when controlling for differences in gender), and further showed a strong increase in the incidence of GAD for women after age 35, and men after age 45 years.

These studies add to our knowledge of GAD by suggesting an increased risk of onset for those aged 30 – 65 years. Many of the studies are, however, limited by the use of retrospective report or cross-sectional designs. Unlike the prospective studies previously described, these studies have not investigated gender differences in relation to a later age of onset. Following initial findings suggesting possible gender differences in the patterns of GAD symptomatology across adolescence, this could also be the case in adulthood and may be an important area of future research.

Bi-modal Onset

Further research, primarily with those in later life, suggests that GAD can develop at multiple points in life. Hoehn-Saric, Hazlett, and McLeod (1993) first investigated this by comparing individuals with early ($n = 66$) and late ($n = 37$) symptom onset. Those in the early onset group developed GAD before age 20 (with 15% reporting symptom onset before age 10 and 85% between 10 to 19 years), while those in the late onset group after age 20 (with 43% developing symptoms between ages 20 – 29, 31% between ages 30 – 39, and 22% at or after age 40). Beck, Stanley, and Zebb (1996) also identified early and late onset of GAD, and compared those whose excessive worry began before age 15 ($n = 16$) and after age 39 ($n = 17$). Similarly, Gonçalves and Byrne (2012) found that in older adults aged 55 – 85, 31% ($n = 70$) reported onset before age 26, while 69% reported onset after 26. Le Roux, Gatz, and Wetherell (2005) also explored the distribution and correlates of age-at-onset of later life GAD, however their comparison was of those whose symptoms began before (early onset) and after (late onset) age 50.

Although these studies are limited by retrospective report, a mixed age range of focus (primarily older adults), and variable sample sizes, collectively they suggest that the onset of GAD may be bi-modal, with different pathways leading to its development.

Summary

In summary, much research suggests middle adolescence as a period of time of increased risk of GAD onset. Mixed findings have been reported in relation to gender differences in onset at this point in life, with methodological differences, and variation in the measures and DSM classification criteria utilised potentially accounting for this. This does, however, suggest that firm conclusions on the onset of GAD in adolescent girls and boys cannot yet be drawn. Other research has suggested that later onset may be more common, particularly among those aged 30 to 64 years. These studies, however, are primarily based on retrospective report and have not investigated possible gender differences in the patterns of GAD onset in adulthood.

These separate lines of enquiry into early and late onset may both be supported by further research suggesting that GAD onset may be bi-modal, with different pathways leading to its development. Further prospective research is required into these possibilities in order to draw firm conclusions as to age of onset of GAD.

Environmental/Family Factors

Parent-Child Relationship Quality / Attachment

Attachment theory describes the manner in which each person understands themselves, their relationships and their world, with an individual's attachment style thought to develop over an infant's early life through the countless number of interactions with those around them (Bowlby, 1969, 1973, 1980). It is theorised that experiences of sensitive and responsive attunement within interactions with primary caregivers help an infant develop a secure attachment and learn to regulate their emotions, perceiving the caregiver as a safe base from which to explore the world. Consequently, attachment theory suggests that early attachment quality influences how an individual will later perceive others in interpersonal interactions. Children of parents who are not attuned to their needs may become insecurely attached (avoidant or ambivalent attachment).

Generally, it is hypothesised that insecure attachment may be a risk factor for mood and anxiety difficulties, with research finding both adolescents (Muris, Meesters, van Melick, & Zwambag, 2001) and adults (Myhr, Sookman, & Pinard, 2004) who

classify themselves as securely attached report significantly lower levels of anxiety and depression than those who suggest they are insecurely attached. Furthermore, a recent meta-analysis (Colonnesi et al., 2011) indicated that an ambivalent attachment style showed the strongest association with childhood anxiety.

Research specifically exploring perceived attachment style and its association with GAD is growing. Cassidy (1995) first proposed that the development of GAD may lie in insecure attachment. She hypothesised that the interpersonal nature of GAD worries, emotional regulation difficulties and cognitive errors displayed by those with GAD, all fit within this theoretical framework. A study (Muris, Meesters, Merckelbach, & Hülsebeck, 2000) with primary school children (n = 159) found that those self-classified as having avoidant or ambivalent attachment styles reported higher levels of worry than children self-classified as securely attached. Replicating this study with 7 – 18 year olds (n = 64) with a primary anxiety disorder, Brown and Whiteside (2008) found those who classified themselves as ambivalently attached reported higher levels of worry than those who were securely attached. This difference with regards to the association between avoidant attachment and reported levels of worry is interesting and suggests that an ambivalent attachment style may be most closely associated with worry.

In research with adolescents, Hale, Engels, and Meeus (2006) found that 12 – 19 year olds (n = 1,106) perceptions of parental rejection, over-control (psychological control and over-involvement), and attachment (alienation and trust) all significantly correlated with GAD symptoms. Only perceived parental alienation and rejection, however, uniquely predicted self-reported GAD symptoms. These authors further explored potential age and gender differences within this relationship, with their results indicating GAD symptoms in mid-adolescence females were more related to perceived parental alienation, while for early-adolescence males they were more related to parental rejection. Similarly, research comparing undergraduates with (n = 48) and without GAD (n = 53) reported that participants with GAD described less secure attachments to parents than controls (Eng & Heimberg, 2006), while within a group of high-risk females in the community (n = 154) it was found that an angry-dismissive attachment style was significantly associated with GAD (Bifulco et al., 2006). Furthermore, Cassidy, Lichtenstein-Phelps, Sibrava, Thomas, and Borkovec (2009) compared individuals with (n = 69) and without GAD (n = 69) finding that GAD participants reported experiencing less maternal love in childhood, greater

maternal rejection and neglect, and more maternal role reversal and enmeshment (defined as fear of losing and therefore needing to protect a primary caregiver). Individuals with GAD also reported more current vulnerability in their maternal relationship.

These correlational findings have generally been interpreted as suggesting the influence of parental behaviour on the development of adolescent anxiety (Loulis & Kuczynski, 1997). However, van Eijck, Branje, Hale, and Meeus (2012) suggest the importance of considering the transactional nature of this relationship, highlighting that adolescents' GAD symptoms could affect relationship quality with their parents. In a Dutch longitudinal study with early ($n = 923$) and middle ($n = 390$) adolescents, these authors found that adolescents' GAD symptoms and perceived attachment quality with their father negatively influenced each other over time. This was not the case for mothers, with only adolescents' GAD symptoms longitudinally predicting perceived mother-adolescent relationship quality. Similar to Hale et al (2008), this study also investigated the role of adolescent age, finding that for those in middle adolescence (mean = 16 years) the relationship between GAD symptoms and perceived attachment quality with fathers was stronger. Subsequent prospective research investigating the development of GAD symptomatology in relation to parent-child relationship quality and attachment style would help further explore the reciprocal nature of this interaction.

Literature within this area also highlights the importance of which attachment figure is considered. Most studies investigating this relationship tend to only include mothers or consider both parents as a single unit (van Eijck et al., 2012). However, recent findings suggest that parents' gender can be a significant factor. Viana and Rabian (2008) asked undergraduate students ($n = 94$) to complete measures of GAD symptoms and parent and peer attachment. They found a significant association between GAD symptoms and attachment relationship quality with mothers, but not with fathers. These findings add to the differences found for mothers and fathers in the direction of the relationship between attachment style and GAD symptoms (van Eijck et al., 2012). A significant association between GAD symptoms and greater perception of alienation from peers was also found by Viana and Rabian, highlighting the role of other important relationships on GAD symptomatology. Similarly, Shanahan, Copeland, Jane Costello, and Angold (2008)

found that GAD was associated with friendship difficulties in preadolescent males and adolescent females.

Summary

Overall, research throughout childhood, adolescence and adulthood appears to support the relationship between a secure attachment and lower levels of worry or GAD symptoms. Existing research has found contrasting results in relation to the specific aspects of insecure attachment styles which are important in the development of GAD, compounded by the use of differing ways of measuring and categorisations of attachment styles. This highlights the need for further research within this area, with extension into the older adult population in order to investigate the importance of this factor in GAD onset in later life. Furthermore, exploring the impact of relationship quality with differing caregivers and peers, and the transactional nature of these relationships, is of importance in order to further specify potential risk factors across different populations.

Parenting Style

Research on parenting style has primarily focused on aspects of parenting considered negative, including rejection, over-control, and lack of emotional warmth. A meta-analysis (McLeod, Wood, & Weisz, 2007) concluded that parental control (including autonomy-granting and overprotectiveness) was more strongly associated with childhood anxiety than parental rejection. Further studies have concluded that anxious adults generally remember their parents as being rejecting and controlling (McLeod et al., 2007). However, using retrospective report has been criticised due to reliability concerns.

Following this, literature has focused specifically on the link between parenting style and GAD. In a study investigating psychosocial risk factors across a range of behavioural and emotional disorders, Shanahan et al. (2008) assessed a community sample of children aged 9, 11, and 13 years old ($n = 4,500$). They found over-intrusive parenting to be associated with all the difficulties investigated, and that harsh discipline was a specific risk factor for GAD only. Muris et al (2000) found that children perceiving their parents as more rejecting had higher levels of worry, while Muris & Mercklebach (1998) found that parental control correlated with GAD symptomatology. Muris (2002) further found worry was associated with anxious

rearing and overprotection for adolescent girls, but only overprotection for boys. With a clinical sample of 64 children (8 with GAD) aged 7 – 18 years, Brown and Whiteside (2008) found significant correlations between parental rejection and worry, but not anxious rearing, overprotection or emotional warmth. Furthermore, using a case-control design, Nordahl, Wells, Olsson, and Bjerkeset (2010) compared a clinical sample of 42 children (22 with GAD) aged 8 – 13 years old with a gender-matched control group (n = 42). The results indicate that childhood GAD was specifically associated with parental overprotection, parental pressures, inadequate supervision/control, and acute threats.

The way in which an individual perceived the parenting they received has also been associated with GAD. In a study examining 1,033 adult female twins retrospective reports of parental coldness, protectiveness and authoritarianism, Kendler, Myers, and Prescott (2000) found that parental protectiveness had a significant independent contribution to GAD risk. Cassidy et al (2009) further found that retrospective reports of maternal and paternal coldness were associated with adult GAD, while Hale et al. (2006) found that adolescents (n = 1,106) perceptions of parental alienation and rejection were strongly associated with GAD. Hale et al further found gender differences in perceptions of parental behaviours, with mid-adolescence females perceiving more parental alienation and mid-adolescence males perceiving more parental rejection in relation to GAD.

Much literature investigating this relationship appears to have interpreted the interaction as parental behaviour having a major influence on GAD symptomatology. Wijsbroek, Hale, Raaijmakers, and Meeus (2011), however, aimed to explore the direction of effects between perceived parental control and adolescent anxiety symptoms (including GAD) in 1,313 Dutch adolescents. Their results suggested a unidirectional relationship, with adolescents who initially reported high levels of anxiety symptoms perceiving their parents as becoming more controlling over time. Furthermore, adolescents with self-reported GAD symptoms reported perceiving their parents as more psychologically rather than behaviourally controlling over time, which the authors suggest could be due to a cognitive bias associated with GAD.

Summary

Although many studies are limited by cross-sectional designs and retrospective self-report, they add to our knowledge on the interaction between parenting style and GAD. Many studies suggest a relationship between an individual's perception of parenting and levels of GAD, particularly if parenting is perceived as cold, over-protective, anxious, rejecting or controlling. Harsh discipline and parental psychological control may be particularly important risk factors.

These studies however, do not tell us about the direction of these relationships, with Wijsbroek et al. (2011) investigating this. Their study suggesting a unidirectional relationship, with adolescent GAD symptoms predicting parental control, highlights the importance of this knowledge in order to inform our interventions, with a cognitive bias being held by the adolescent as their hypothesis for their findings.

Parental Mental Health

The role of parental mental health in the development of emotional and behavioural disorders in general, as well as for specific difficulties, has been investigated by Shanahan et al. (2008). They found parental depression was associated with all emotional and behavioural difficulties investigated, but that in GAD parental depression was linked to pre-adolescence only. Similarly, Nordahl et al. (2010) further found that children with both GAD and oppositional defiant disorder had higher rates of parental mental health difficulties than a control group.

A further study investigated the role of parental mental health, including GAD, on anxiety disorders in offspring. Schreier, Wittchen, Höfler, and Lieb (2008) compared offspring of mothers with and without anxiety disorders, reporting that those offspring whose mothers had an anxiety disorder had an elevated risk of developing any anxiety disorder. In particular, maternal GAD and social phobia were associated with increased child anxiety, especially mothers whose anxiety difficulties were longstanding, severe and co-morbid.

Summary

In summary, both parental depression and anxiety has been associated with childhood emotional difficulties, particularly in pre-adolescence. Further research

within this area is required in order to tease out how parental mental health difficulties impact on GAD, for example, through influencing parenting style adopted.

Childhood Maltreatment

Childhood maltreatment (including neglect, physical and sexual abuse) has consistently been found to be associated with a range of mental health difficulties (Beesdo, Knappe, & Pine, 2009). For example, Kessler et al. (2008) report associations between retrospectively reported childhood adversities and onset of DSM-III-R disorders, and the extent of childhood sexual abuse has consistently been associated with risk of mental health difficulties (Beesdo et al., 2009).

More recent research has aimed to investigate whether childhood abuse differentiates the type of anxiety disorders later experienced. In a study investigating childhood abuse in individuals with panic disorder, social phobia and GAD, Safren, Gershuny, Marzol, Otto, and Pollack (2002) found similar rates amongst these three populations. Cogle, Timpano, Sachs-Ericsson, Keough, and Riccardi's (2010) study differentiating physical and sexual childhood abuse found unique relationships between sexual abuse and social phobia, panic, GAD and posttraumatic stress disorder, while Moffitt et al. (2007) found that 'pure' GAD had unique childhood risk factors of low socio-economic status and more maltreatment. Similarly, Kendler et al. (2000) reported that onset of pure generalised anxiety syndrome (defined as GAD with a 2-week minimum duration) was predicted by higher ratings of danger. Unlike these studies, however, Shanahan et al. (2008) found that childhood sexual abuse was a risk factor specific to behavioural not emotional (including GAD) disorders. Further research differentiating those with early and late onset GAD (Gonçalves & Byrne, 2012) suggested that childhood physical abuse was a significant risk factor for developing GAD at an earlier age, with those who reported being beaten by a caregiver having an earlier onset age.

Gender differences in response to childhood abuse have also been discussed, both across mental health difficulties and in relation to GAD. In general, studies conclude there is a stronger relationship between mental health difficulties and childhood abuse for women than men (Beesdo et al., 2009). Although limited by low power, Cogle et al. (2010) found a trend towards higher rates of childhood sexual abuse among men with GAD and panic disorder. Further research has begun investigating

possible mediators of this relationship. Bifulco et al. (2006) suggest that adult attachment style may have a mediating role and found that an angry-dismissive style was associated with GAD.

Summary

Studies investigating the relationship between childhood maltreatment and GAD have found mixed results. Some studies suggest equivalent rates of abuse across anxiety disorders, while others propose higher rates of abuse for this population and a unique relationship with sexual abuse. Furthermore, initial research has also found mixed results when investigating hypothesised gender differences.

These mixed findings could also be the result of methodological differences across studies. For example, the types of abuse researched has varied, with some studies focusing on physical abuse only and others incorporating a wider range of abuse experiences, and researchers have necessarily relied on retrospective report, which may be subject to recall bias. Future research is required to further investigate whether there is a relationship between differing types of childhood maltreatment and GAD specifically. Alongside this, as literature has consistently suggested childhood maltreatment as a general risk factor for mental health difficulties, exploring potential mediators of this relationship could help identify particular psychological processes important in the development of GAD following abuse experiences.

Significant Negative Life Events

Negative and stressful life events have been researched across mental health difficulties suggesting an association between life events and anxiety disorders (Beesdo et al., 2009). Research specific to GAD has found that children (Nordahl et al., 2010) with GAD ($n = 22$) and ODD ($n = 21$) report significantly more acute life events (defined as altered patterns of relationships, traumatic experience, abuse, loss and sudden removal from home) than controls ($n = 42$). Furthermore, children with GAD reported higher levels of threatening experiences and acute negative life events than those with ODD. Similarly, Manassis and Hood (1998) found that psychosocial adversity predicted the degree of impairment in children with GAD, but not those with phobias.

Similar research with adults (Roemer, Molina, Litz, & Borkovec, 1996) suggests that those with GAD ($n = 62$) were more likely than non-anxious controls ($n = 48$) to report exposure to a potentially traumatising event, and that GAD was three times more prevalent in individuals who had experienced at least one, unexpected negative life stressor (Blazer, Hughes, & George, 1987). Investigating the role of stressful life events on GAD relapse in a naturalistic longitudinal study, Francis, Moitra, Dyck, and Keller (2012) further found that an increased number of stressful life events were associated with a higher cumulative probability of relapse, with a non-significant trend for events involving health, death, and family/friends/household. Worsening of GAD was not related to work, money, love, crime or residential stressors.

Research looking at specific types of negative life events suggests that individuals with GAD ($n = 32$) were more likely than those with panic disorder ($n = 29$) to have lost a parent before age 16 (Torgersen, 1986) and that onsets of pure generalised anxiety syndrome in 7,322 male and female adult twins were predicted by higher ratings of loss (Kendler, Hettema, Butera, Gardner, & Prescott, 2003). Shanahan et al. (2008) found inter-parental violence to be a risk factor associated with all emotional and behavioural disorders they investigated, but that it was more specifically associated with GAD in pre-adolescent males and adolescent females only.

Further research differentiating those with early and late onset GAD has found that those with early onset were more likely to have developed GAD without a precipitating stressful life event, while Le Roux et al. (2005) found no support for the suggestion that those with later onset were more likely to have experienced negative life events, such as widowhood, poor health or cognitive impairment. The influence of gender on this relationship has also been investigated, with Blazer et al. (1987) concluding that men who reported four plus events were 8.5 times more likely to experience GAD than those reporting zero to three events. This relationship was not found for women.

Other research has begun considering possible mediators within this relationship. For example, Rapee, Litwin, and Barlow (1990) found that the number of stressful life events and an objective rating of their negativity did not differ across anxious

(including individuals with GAD) and non-anxious adults. Anxious adults, however, reported a greater impact of these events, leading the authors to hypothesise that this population may experience them as more distressing.

Summary

Overall, studies across the lifespan suggest that those with GAD may be more likely to experience more acute and traumatising life events, leading to a higher degree of impairment and chance of GAD relapse. Specific life events linked with GAD include those related to loss and inter-parental violence, although age and gender differences have been noted. These studies have, however, been limited by the investigation of differing types of life events, small sample sizes and the use of retrospective self-report, which may be influenced by attentional biases (Francis et al., 2012). Further research can help us ascertain whether stressful life events initiate or maintain GAD (Roemer et al., 1996).

Other research has begun exploring possible mediators within this relationship, with vulnerability to anxiety hypothesised as one important factor. Similarly, others have begun discussing the role of other mechanisms that may moderate the impact of negative life events upon anxiety difficulties (Donovan & Spence, 2000). Expanding this to GAD would help develop our knowledge of these potential mechanisms and the influence of factors such as parental behaviours and aspects of individual coping styles.

Current cognitive models' accounts of aetiological factors and recommendations for future research

Within the context of dominant cognitive theoretical models (AMW, IoU, Metacognitive Model), there has been relatively little effort undertaken to understand the factors involved in the onset and development of worry and GAD.

One of the most comprehensive models when considering our theoretical understanding of the vulnerability and risk factors involved in the aetiology of worry and GAD comes from the AMW. This model has explicitly hypothesised that insecure attachment styles and early lifetime events may be influential in increasing the likelihood that a person develops these difficulties. Specifically, Borkovec and

colleagues hypothesise that an insecure attachment style may result in a tendency to overestimate danger and underestimate resources to cope with uncertain events (Borkovec et al., 2004; Cassidy et al., 2009). Furthermore, they hypothesise that early trauma and stressful life events may lead to worry as a way of avoiding these more emotionally distressing topics.

The IoU model hypothesises that being intolerant of uncertainty may contribute to both the development and maintenance of GAD (Dugas, Buhr, & Ladouceur, 2004; Koerner & Dugas, 2006). The model suggests that IoU may directly lead to chronic worry by promoting the use of cognitive biases, such as hyper-vigilance, and indirectly through processes such as positive beliefs about worry, negative problem orientation and cognitive avoidance. The idea of IoU as a factor important in the development of GAD is relatively recent and is therefore an area of research in its infancy. However, Dugas et al. (2004) hypothesise that early childhood interactions with a primary caregiver may contribute to the development of IoU, with this cognitive characteristic placing an individual at risk for GAD. IoU may then interact with stressful life circumstances, which are not necessarily traumatic, leading to GAD. Meanwhile, the Metacognitive Model (Wells, 1995, 2006) suggests that GAD results from the use of worry as a coping strategy and the subsequent development of negative meta-cognitive beliefs about worrying (i.e. worry about worry). Wells hypothesises that negative meta-cognitions develop as a result of deleterious effects of the use of worry and external sources of information about worry being harmful or dangerous, such as parental modelling, social feedback, and outcomes of life events, with the hypothesis that any situation provoking normal worry can activate these negative meta-cognitions.

Collectively, these models vary in their focus on, and explanation of, aetiological factors of worry and GAD. The AMW focuses primarily on interpersonal factors, such as attachment style, in the use of worry and development of GAD, while both the IoU and Metacognitive Model highlight the primary role of cognitive characteristics and beliefs. Although the individual models highlight factors potentially important in the development of GAD, each conceptualisation has primarily focused on maintaining processes.

These theoretical models therefore need to be further developed in order to enhance our understanding of the range of aetiological factors important in the development of worry and GAD. The AMW, for example, hypothesises about the role of an insecure attachment style. However, the specific type of insecure attachment and interactions important in the development of this attachment style has not been directly addressed. Similarly, from the perspective of the IoU model, early childhood interactions, alongside other contributing factors, are implicated in the development of IoU. Furthermore, IoU is considered to be one factor of many contributing to the development of worry. The theory, however, does not explain the types of childhood interactions that may lead to IoU or specify other factors contributing to either IoU or worry more generally. The need for these theoretical developments is required in order to guide further research into aspects of parenting and insecure attachment styles important in the development of GAD. This research needs to further consider the transactional nature of these relationships, as well as the impact of relationship quality with differing caregivers and peers across different stages of the lifespan.

Collectively, the models differ in their focus on the type of life events important in the development of GAD. For example, the AMW hypothesises specifically about the role of early trauma, while the Metacognitive Model proposes that any situation causing worry could be influential. To understand this further the role of different types of life events, including specific types of childhood maltreatment, needs to be explored, as research has started to do. Further research can help us ascertain whether stressful life events initiate or maintain GAD, and explore important mediators and moderators of this relationship.

Finally, these models have not yet attempted to account for the course of GAD over the lifespan and across genders. Further exploration of the developmental course of GAD symptomatology across both gender and the lifespan with prospective longitudinal studies is therefore required to build on initial results around the role of these factors. See Table 1 for a summary of current conclusions and areas for future research.

Table 1. *Summary of current conclusions related to each risk factor and areas for future research.*

Type of Factor	Risk / Vulnerability Factor	Current Conclusions	Areas for Future Research
Demographic	Gender	Research consistently suggests that across the lifespan females have an increased risk of developing GAD compared with males.	Prospective studies exploring the developmental course of GAD symptomatology across gender.
Demographic	Age	Current research suggests both middle adolescence and the age range 30 – 64 years as times of increased risk of GAD onset.	Prospective research to explore early, late or bi-modal onset of GAD and potential gender differences at each point.
Environmental	Parent-Child Relationship Quality / Attachment	Research across the lifespan supports the relationship between a secure attachment and lower worry or GAD symptoms.	<p>Studies into the specific aspects of insecure attachments styles important in GAD development.</p> <p>Research exploring the impact of relationship quality with differing caregivers and peers, and the transactional nature of these relationships.</p>

Table 1. (*cont.*)

Type of Factor	Risk / Vulnerability Factor	Current Conclusions	Areas for Future Research
Environmental	Parental Mental Health	Both parental depression and anxiety has been associated with childhood emotional difficulties.	Studies to tease out how parental mental health difficulties impact on GAD.
Environmental	Childhood Maltreatment	Existing research is mixed - some studies suggest equivalent rates of abuse across anxiety disorders, while others propose higher rates of abuse for the GAD population.	Studies to further investigate whether there is a relationship between differing types of childhood maltreatment and GAD specifically, alongside potential mediators of this relationship.
Environmental	Significant Negative Life Events	Studies across the lifespan suggest that those with GAD may be more likely to experience more acute and traumatising life events.	Studies to ascertain whether stressful life events initiate or maintain GAD, alongside possible mediators within this relationship.

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Session-by-session outcome monitoring in CAMHS: Clinicians beliefs.

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All names used in the report have been changed in order to preserve confidentiality.

Journal to be targeted:

This report is targeted towards The Cognitive Behaviour Therapist, a journal consisting of articles which contribute to theory, practice and evolution of the cognitive and behavioural therapies (see Appendix C for author guidelines and Appendix D for learning objectives and summary of current article, as per guidelines).

Abstract

The CYP-IAPT programme emphasises the meaningful contribution session-by-session routine outcome monitoring (ROM) can make to clinical practice and its importance in highlighting services' effectiveness. Two studies on issues related to the implementation of ROM in children's services were conducted. Study one was qualitative; twelve CAMHS professionals participated in focus groups. Themes identified included the idea that ROM could provide objectivity, could be collaborative and empowering. Concerns included how measures may adversely influence therapeutic sessions and how the information may be used by the service. These themes were used to develop a questionnaire about professional's experience of and views on session-by-session ROM. In study two, 59 professionals from four CAMHS teams completed the questionnaire. It was found that only 6.8% reported "almost always" utilising session-by-session ROM. Detailed analysis of questionnaire responses suggested two factors reflecting the perceived negative and positive impact of session-by-session ROM. It was found that clinicians who currently use session-by-session ROM hold stronger positive and negative beliefs than clinicians who do not. This study suggests that session-by-session ROM is not currently routine practice within CAMHS and highlights the importance of considering how this practice can be best implemented within this setting with reference to clinician attitudes.

Keywords: Session-by-session routine outcome monitoring, CAMHS, Clinicians, Beliefs,

Introduction

Routine outcome monitoring (ROM) to systematically assess the individual impact of psychological therapies has long been regarded as a key part of the scientist-practitioner strategy integral to cognitive-behavioural therapies (Salkovskis, 1984). However, implementing this in clinical practice is often more difficult. The national rollout of the improving access to psychological therapies (IAPT) initiative has seen the prioritisation of ROM in line with government policies (NIMHE, 2005), creating a climate where it is a fundamental requirement of clinical practice (Johnston & Gowers, 2005). ROM measures clinically relevant areas of functioning across therapy, through assessments at baseline and treatment completion/discontinuation. Further monitoring throughout an intervention of an individual's goals, symptoms, and feedback from sessions may supplement this (Johnston & Gowers, 2005).

ROM is required to evaluate an intervention's effectiveness and allow commissioners to evaluate a service's clinical value (Law, 2012). Johnston and Gowers (2005) further advocate ROM as having the potential to enable service user involvement and service development. Fundamentally, however, the most important reason for ROM must be to responsively enhance clinical practice (Law, 2012). By obtaining information about what appears to be helpful and unhelpful, clinical decision-making and responsiveness to clients can be enhanced (Lambert & Shimokawa, 2011). Although important across all services, the use of ROM has traditionally tended to be stronger within adult populations, for example, as demonstrated by the interval between the development of the Clinical Outcomes in Routine Evaluation - Outcome Measure (CORE-OM) (Barkham et al., 2001; Evans et al., 2002) and the Young Person CORE (Twigg et al., 2009).

The IAPT initiative for adults experiencing anxiety and depression successfully incorporated session-by-session ROM (Clark, 2011). Clark et al's (2009) evaluation of two pilot IAPT services demonstrated the importance of a session-by-session system in informing routine clinical services of the significance of missing post-treatment data. By comparing a session-by-session system with a conventional pre-post system, their results suggested that individuals who fail to provide post-treatment data demonstrated significantly less improvement, highlighting the risk of services over-estimating their effectiveness when working this way. This initial evaluation also indicated that a session-by-session system can successfully be implemented within clinical services and achieve high levels of data completeness.

Alongside adult IAPT, literature demonstrates the benefits of frequent client feedback of symptoms and satisfaction on treatment outcomes and retention rates (Lambert et al., 2003; Shimokawa, Lambert, & Smart, 2010), particularly for cases identified as “not-on-track” (Lambert & Shimokawa, 2011). Research suggests that when therapists use ROM their clients are significantly more likely to improve (Miller, Duncan, Sorrell, & Brown, 2005; Whipple et al., 2003), and highlights the importance of frequent feedback of progress to both client and clinician (Knaup, Koesters, Schoefer, Becker, & Puschner, 2009).

The IAPT programme has recently been extended to children and young people (CYP) with the aim to re-design existing CAMHS services, incorporating session-by-session ROM by both IAPT and non-IAPT trained clinicians (Wolpert, Fugard, Deighton, & Görzig, 2012). Currently, it is unclear to what extent ROM findings with adults can be generalised to children and young people, however, the first randomised trial examining this suggests that when clinicians had weekly feedback young people improved faster than those whose clinicians did not (Bickman, Kelley, Breda, de, & Riemer, 2011). Other findings indicate that families reporting discussion of weekly feedback at higher rates also described enhanced therapeutic relationships and child functioning (Stein, Kogan, Hutchison, Magee, & Sorbero, 2010).

The CYP-IAPT model emphasises the valuable contribution ROM can make to clinical work through developing clinically meaningful conversations, and promotes a curious and reflective mind-set by practitioners (Law, 2012). Whilst these potential benefits have been discussed, there is also evidence of both service user and professional concern about this practice. Both advocates of CYP-IAPT (Law, 2012) and young people, parents and carers (Moran, Kelesidi, Guglani, Davidson, & Ford, 2012) recognise that ROM could potentially be viewed as a “tick-box” exercise and highlight concerns that, if not used sensitively, measures could have a negative effect on clinical interactions (Moran et al., 2012).

A common theme across discussions around implementing ROM is the importance of professional’s endorsement of this way of working (Ford, Tingay, & Wolpert, 2006; Knaup et al., 2009). Some suggest that implementing session-by-session ROM within CAMHS may require a culture shift for some clinicians (Law, 2012; Wolpert et al., 2012), as therapists often display confidence in their ability to monitor their clients progress (Hatfield & Ogles, 2006) and a process of formally monitoring

therapist's outcomes may understandably evoke anxiety due to its public and transparent nature (Lambert, 2007). Johnston and Gowers (2005) found that lead clinicians within CAMHS named staff resistance and resource shortfalls as frequent obstacles to ROM. Staff resistance included worries that using quantitative measures advocates a medical model and would reduce the value of clinical judgements, while resource shortfalls incorporated concerns about IT deficits, staff training, funding, and the need for staff ownership.

Within cognitive behavioural therapy, the influence of thoughts and beliefs is assumed to apply as much to therapists as to clients (Westbrook, Mueller, Kennerley, & McManus, 2010). Research investigating this hypothesis in relation to therapist beliefs about the use of homework demonstrated a clear link between therapists' self-reported beliefs and practices (Fehm & Kazantzis, 2004; Kazantzis, Lampropoulos, & Deane, 2005). Research has not yet examined the influence of therapist beliefs on use of ROM.

While previous studies give us some ideas of therapist's attitudes towards ROM, they asked only for lead clinician's views (Johnston & Gowers, 2005). With the expanding implementation of CYP-IAPT, the present study was designed to explore a range of CAMHS professional's beliefs that may act as both barriers and drivers in the use of session-by-session ROM. Session-by-session ROM, as opposed to the broader pre-post definition (Johnston & Gowers, 2005) that has been the emphasis of previous research, was the specific focus of interest, as this clinical practice is expected as part of CYP-IAPT and may pose its own opportunities and challenges. It was hypothesised that clinicians currently using session-by-session ROM would describe stronger positive beliefs and weaker negative beliefs, compared to those not currently utilising a session-by-session system. It is hoped that exploring these views can help inform the implementation of this way of working within CAMHS. Initially, focus groups were run to explore CAMHS clinician's beliefs about session-by-session ROM. These findings then informed the development of a questionnaire distributed within four CAMHS teams.

The Service

The project developed from a discussion around CYP-IAPT and how session-by-session monitoring might be received by CAMHS clinicians, particularly following experiences of the implementation of CORC. The service had previously been part of a bid to become a new site for the CYP-IAPT programme, however this was

unsuccessful and a new bid was in process, with the service having a strong commitment to the model .

In developing the research, relevant profession (e.g. CAMHS Psychology meeting) and team meetings were attended by the lead researcher (KJ) to further discuss the project design and feasibility. For example, there were discussions about carrying out initial interviews or focus groups to inform the development of a questionnaire. Further aspects were discussed such as the feasibility of visiting all CAMHS teams within the region. The project was also discussed with the Professional Lead for Psychology and those leading the CYP-IAPT bid for the host trust.

Ethical Considerations

Service evaluation approval for both studies was granted by North Bristol NHS trust audit committee, which was endorsed by the University of Bath Ethics Committee (13-015) (see Appendix E).

Study 1

Method

Focus groups were used to obtain a wide range of professional's views on session-by-session ROM (Nassar-McMillan & Borders, 2002). The focus group structure enabled the researchers to introduce and explain the research area to several participants at once, and facilitated conversations between practitioners about their views on this practice.

Sample

The sample consisted of CAMHS professionals (including psychologists, psychiatrists, family therapists, primary mental health workers, and psychotherapists) at a team away day. Team members were informed about the research, provided with a consent form (see Appendix F), and everyone present participated. Three focus groups were run comprising of a total of 12 participants (from a team of 15), with a mean of 4 participants per group.

Content of the focus groups

Each focus group provided an explanation of the research and an introduction to the CYP-IAPT session-by-session measures. Participants were asked to think about the potential pros and cons of this practice, both for professionals and service users and their families (see Appendix G for focus group structure), for approximately 30

minutes. The groups were facilitated by the researchers (KJ, SE, TH), the first a clinical psychologist in training and the latter both experienced CAMHS clinical psychologists. All groups were audio-recorded and transcribed (Clausen, 2012). The data from each transcribed focus group was reviewed by four of the researchers individually, with key themes within positive and negative views summarised by the first author and reviewed and amended by all.

Results

It was clear from the transcripts that the comments divided into perceived advantages and disadvantages (“pros and cons”) of ROM, and the results are structured accordingly.

Potential pros of session-by-session monitoring for clinicians.

The most common theme when clinicians were asked to consider the potential pros of session-by-session monitoring was that this way of working provides an objective and systematic view of a young person's experience, of progress made throughout therapy and can inform decisions around discharge (seven comments).

Session-by-session monitoring helping to provide focus (five comments) and being a collaborative process between clinicians and young people which encourages feedback (five comments) were other prominent themes. Responses in relation to this way of working providing focus included thoughts that the measures are “client-focused” and “keeps clinicians on task”.

Further themes identified included that this way of working can encourage the client to take responsibility (three comments), is a way of enabling CAMHS to demonstrate change (three comments), and is a potential tool for engagement (two comments) and useful if quick and easy (two comments).

Potential cons of session-by-session monitoring for clinicians.

The most common theme when clinicians were asked to consider the potential cons of session-by-session monitoring was concern about how the information would be used (nine comments). Clinicians' concerns around this included whether information would be used for performance management or comparison between therapists, and whether outcomes would be seen in isolation and take the complexity of therapeutic work into account. Session-by-session monitoring influencing the focus of therapeutic sessions by being goal-driven, direct and

resulting in therapists not attending to other important issues was another prominent theme (six comments). Further themes identified included this way of working resulting in extra work for clinicians (five comments), being time consuming (four comments), and negatively impacting on or interrupting the development of a therapeutic relationship (four comments).

Potential pros of session-by-session monitoring for clients.

CAMHS professionals most commonly suggested that a potential pro of session-by-session monitoring, from a young person's perspective, could be its collaborative nature which empowers young people to feedback their views (six comments). Young people being able to see their progression over time and this being motivating and providing a sense of achievement was another prominent theme (four comments). Further themes identified included session-by-session monitoring being motivational for a young person (three comments), helping to provide a focus of therapeutic work (three comments), and potentially working better with appropriate technology (two comments).

Potential cons of session-by-session monitoring for clients.

CAMHS clinicians most commonly discussed the potential barriers that session-by-session monitoring may result in for young people (five comments). Within this theme, clinicians considered whether some young people may view this as not a collaborative way of working and could feel that they are being tested and not listened to. Further themes included session-by-session monitoring being perceived by young people as a "paper exercise" (three comments), being demoralising (three comments), and taking time away from talking about their difficulties (two comments).

Study 2

Method

Participants

59 CAMHS clinicians (from a possible 76; 78%) were recruited from four CAMHS teams in the South West region. At a team meeting, potential participants were provided with an introduction to the research and the CYP-IAPT session-by-session measures, alongside the consent form (see Appendix H). Those who were happy to participate completed the consent form, followed by the session-by-session ROM questionnaire.

Measures

Session-by-session Outcome Monitoring Questionnaire

Item Development

The identified themes (and detail within these) from study one were developed into possible questionnaire items by the first author (36 items) as far as appropriate using phrasing from the focus group transcripts. Items were designed to reflect both the positive and negative views expressed and covered practitioner's views on areas including: feasibility, impact on the therapeutic relationship, measures psychometrics, their clinical value, the role of technology, and service-related issues. Review of each item by all clinicians aimed to ensure clarity in individual items and prevent repetition. A meeting between the four clinicians further reviewed items, and agreed the questionnaire construction and format. The final questionnaire balanced the number of positive and negatively phrased statements.

Questionnaire Description

The final questionnaire consisted of 34 self-report items assessing professional's demographic characteristics, attitudes towards, and use of, session-by-session ROM (see Appendix I).

Twenty-six items were designed to explore professional's attitudes, phrased as statements about session-by-session ROM and its role in clinical practice. Although the term 'routine outcome monitoring' (Wolpert et al., 2012) is frequently used within the literature, the term 'session-by-session outcome monitoring' was used to reflect the nature of this practice expected as part of CYP-IAPT. Professionals were asked to rate their agreement on a 5-point Likert scale ranging from 1 (not at all) to 5 (totally), a rating scale consistent with existing CYP-IAPT measures (CORC, 2012).

In addition to items exploring professional's attitudes, participants were asked to provide an overall rating of how often they currently use session-by-session monitoring (i.e. "How often do you currently use session-by-session monitoring in your clinical practice?") on a 5-point Likert scale ranging from 1 (never) to 5 (almost always). Professionals were also asked whether they have received any CYP-IAPT training ('yes' or 'no') and provided space for any comments on the questionnaire or session-by-session monitoring more generally.

As this questionnaire was designed specifically for this research, the reliability and validity has not been established.

Results

Sample Characteristics

Table 1 outlines the demographic information for the 59 CAMHS professionals (from a possible sample of 76). Of those providing demographic information, the majority were white British (64%; $n = 38$), female (63%; $n = 32$), and within the age range of 41 to 50 years (39%; $n = 23$). However, up to 24% of participants did not provide one or more of these details. A range of mental health professionals were represented within the sample, alongside a range of years' experience working in CAMHS (see Table 1). The majority of participants (88%; $n = 45$) had not received any CYP-IAPT training, and 58% ($n = 34$) reported 'never' using session-by-session monitoring as part of their current clinical practice.

Items with a high proportion of missing data

Inspection of the raw data suggested high levels of missing data across two questionnaire items – numbers 18 (“works well with technology to support it”) and 21 (“costs too much to use”). Twenty-two participants (37%) did not answer item 21, and 14 participants (24%) did not answer item 18. The low response rates on these two items suggested that many CAMHS clinicians did not feel able to answer them as they required factual information not accessible to them (e.g. the cost). Therefore, these items were removed from the dataset prior to any analyses.

Overall Scale Reliability

Based on the remaining 24-items, high internal consistency was indicated (Cronbach's $\alpha = 0.938$).

Table 1. *Demographic Statistics*

Variable	%	N
Gender		
Male	14%	8
Female	63%	37
Not Provided	24%	14
Age (in years)		
20 – 30	5%	3
31 – 40	24%	14
41 – 50	39%	23
51 – 60	15%	9
61 or above	8%	5
Not Provided	8%	5
Ethnicity		
White British	64%	38
White Other	7%	4
Other	8%	5
Not Provided	20%	12
Profession		
Clinical Psychology	19%	11
Family Therapy	10%	6
Primary Mental Health Work	15%	9
Child Psychotherapy	15%	9
Psychiatry	19%	11
Nursing	12%	7
Occupational Therapy	5%	3
Not Provided	5%	3
Years CAMHS Experience		
0 - 5 years	19%	11
5 - 10 years	25%	15
10+ years	36%	21
Not Provided	20%	12
Frequency of use of session-by-session monitoring		
Never	58%	34
Sometimes – Almost Always	35%	21
Not Provided	7%	4
CYP-IAPT Training		
No	88%	52
Yes	7%	4
Not Provided	5%	3

Attitudes towards session-by-session monitoring

Exploratory Factor Analysis

After negatively-phrased items were reverse-scored, an exploratory factor analysis using principal components for the 24 questionnaire items was carried out using orthogonal (Varimax) rotation. The aim was to identify, in a preliminary way, clusters of items relating to each other. Examining eigenvalues > 1 and inspecting the scree plot (see Appendix J) indicated a two-factor solution. These two factors accounted for 49.75% of the variance. The results of this analysis are shown in Table 2.

Six items loaded onto factor one. It is clear from Table 2 that these items relate to beliefs about negative aspects around using session-by-session monitoring in CAMHS, with the highest loading being on “takes too much time to complete”; therefore this factor was labelled “negative impact of session-by-session monitoring”. Six items loaded onto a second factor related to beliefs about positive aspects of using session-by-session monitoring, with the highest loading being on “encourages feedback between the clinician and young person”. This factor was labelled “positive impact of session-by-session monitoring”. The internal consistency for both of the sub-scales was examined using Cronbach’s alpha. The alphas were high for both negative ($\alpha = 0.893$) and positive ($\alpha = 0.908$) impact sub-scales.

A third factor comprising of three conceptually unrelated items: numbers 5 (“encourages the young person to take responsibility for making change”), 6 (“is helpful as it measures individual clinician performance”), and 1 (“provides clinicians with an objective view of whether progress has been made over time”) was identified. This was not further analysed. See Appendix K for table detailing factor loadings for all questionnaire items.

Subscale scores were calculated for each factor, based on the total score of the items making up that sub-scale divided by the number of items (six for each factor). Higher scores indicate higher levels of agreement with the items. The negative impact factor ($n = 42$) had a mean of 2.79 ($SD = 0.95$) and the positive impact factor ($n = 49$) a mean of 3.52 ($SD = 0.78$).

Table 2. Factor Loadings for Session-by-Session Outcome Monitoring
Questionnaire Two Factor Solution

Subscale Items	Factor Loading	
	1	2
<i>Negative Impact of Session-by-Session Monitoring:</i>		
(8) ...takes too much time to complete	0.814	
(2) ...wastes time in sessions	0.754	
(4) ...and form filling implicitly interrupts the therapeutic relationship	0.744	
(25) ...is too prescriptive for clinicians	0.729	
(13) ...is another job for clinicians to take on	0.671	
(22) ...does not fit with more complex cases	0.649	
<i>Positive Impact of Session-by-Session Monitoring:</i>		
(3) ...encourages feedback between the clinician and young person		0.775
(24) ...if used meaningfully is helpful clinically		0.762
(17) ...is a collaborative way of working with a young person		0.725
(9) ...helps keep BOTH the clinician and client focused on the goal of therapy		0.714
(11) ...has no value for clinicians (reverse scored)		0.698
(7) ...helps clinicians understand what the young person wants to change		0.613

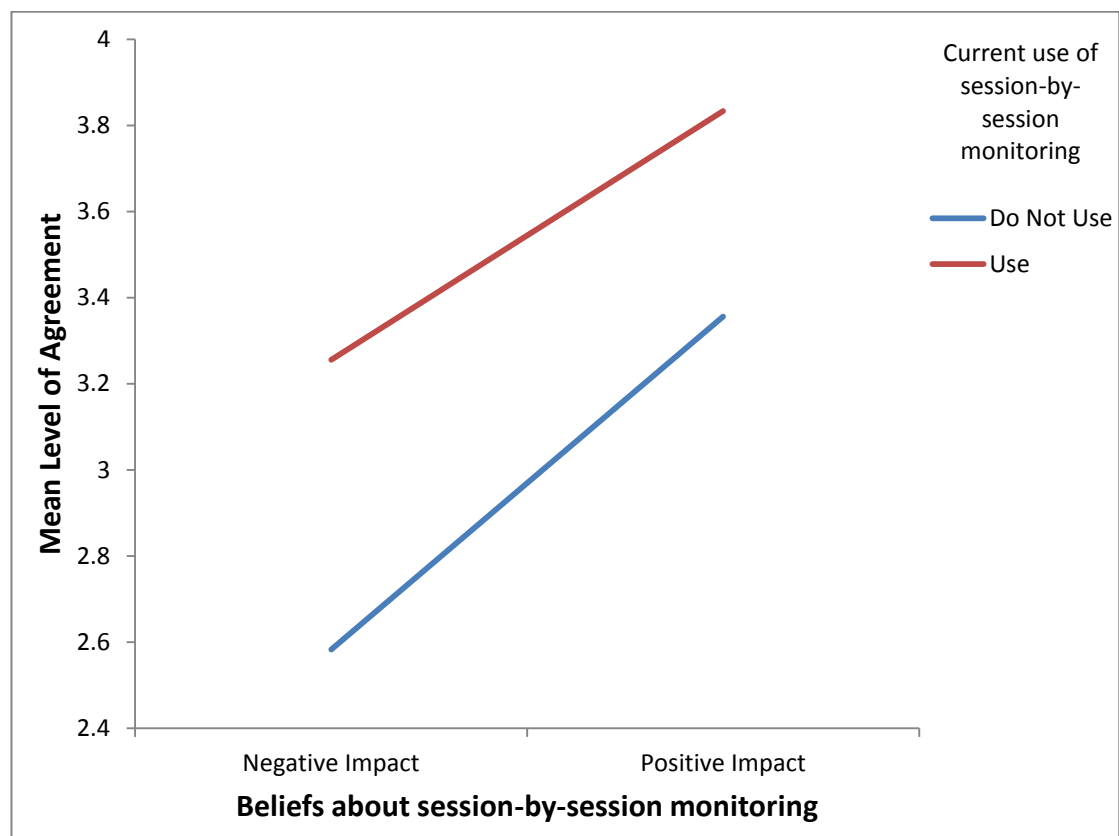
Current Use of session-by-session monitoring

To compare beliefs as a function of professionals' current use of session-by-session monitoring, the frequencies of use of measures were examined (See Frequency Table in Appendix L). A pragmatic distinction of never used routine measures vs. used routine measures on some or many occasions was used. To distinguish those who have never used ROM from those who have, we used the item asking participants to illustrate how often they currently use this practice. Participants who indicated never using ROM (1) on this item were grouped, as were those who indicated using ROM at differing frequencies (2 – 5). This then formed the group of participants indicating varying use of session-by-session monitoring ($n = 21$) and those suggesting they "never" use this way of working ($n = 34$), for the planned comparison described next.

A two-way mixed model Analysis of Variance (ANOVA) was performed on the uncorrected scores. The repeated measures factor (beliefs) was the negative and positive impact of session-by-session monitoring sub-scales. The between subjects factor (use of session-by-session monitoring) was whether participants indicated

that they did or did not currently use session-by-session monitoring. This analysis indicated a significant main effect for the within subjects factor “beliefs” (positive vs. negative beliefs about the impact of measures) ($F_{(1, 35)}=19.542, p=.001$), which indicated that overall, regardless of group, participants were more in agreement with positive than negative beliefs. For the between subjects factor “current use of session-by-session monitoring” ($F_{(1, 35)}=5.321, p=.027$) a significant main effect showed that those who used session-by-session monitoring were in stronger agreement with both positive and negative beliefs. There was no significant beliefs by current use of session-by-session monitoring interaction ($F_{(1, 35)}=.407, p=.528, ns$) (see Figure 1).

Figure 1. Line Graph to show Mean Value on Positive and Negative impact sub-scales for those who do and do not use session-by-session monitoring.



Demographic Factors

To explore whether any other between group differences might account for the belief ratings analyses examining demographic factors were completed. Variables examined included age and years of CAMHS experience (as this may be linked to

flexibility of beliefs), gender (as men and women may hold different beliefs), and profession (as some professions may be more likely to use outcome measures). Sample sizes in each analysis vary due to missing demographic data.

Firstly, an independent samples t-test indicated that there was no significant between group difference for age ($t_{(48)} = -.981$, $p = .331$). Chi-square analyses, comparing males and females who do and do not use session-by-session monitoring, suggested no significant association ($\chi^2_{(1, n=42)} = 1.235$, $p = .266$). Further chi-square analyses, investigating differing years of CAMHS experience ($\chi^2_{(2, n=45)} = 1.263$, $p = .532$) and professions ($\chi^2_{(7, n=49)} = 10.687$, $p = .153$) in those who do and do not use session-by-session monitoring, also suggested no significant associations.

Additional Comments

Clinicians were asked for further comments on session-by-session monitoring in an open-ended question. The most common theme (11 participants) was of being unsure about session-by-session monitoring due to too little knowledge or experience, and understanding of its impact on clinical work.

Concerns over the use of session-by-session monitoring with more complex cases (8 participants) and the importance of the therapeutic relationship (8 participants) were also prominent. Further themes identified included clinical practice already including session-by-session monitoring (7 participants), the meaningfulness of this practice (6 participants), concerns over the limitations of measures (5 participants), and the particular therapeutic model involved (4 participants).

Discussion

Surprisingly, the present study is the only one we are aware of which has examined beliefs and actual practice of session-by-session ROM in CAMHS. The results of the focus groups suggested prominent themes that session-by-session ROM provides objectivity, and the view that it can be both collaborative and empowering. Other themes identified concerns over how the information would be used by managers and how the measurement process might adversely influence therapeutic sessions. Drawing on a quantitative analysis in a larger group, it was found that only 6.8% of participants reported “almost always” utilising session-by-session ROM, and that only 7% had received CYP-IAPT training. This suggests that session-by-

session ROM is not current practice within these CAMHS teams. The results of the questionnaire based on these focus groups were consistent with the themes, with six items identified as reflecting the perceived negative impact of session-by-session ROM, and six items the perceived positive impact. It was also found that those who currently use this way of working hold stronger positive and negative beliefs than those who do not. Age, gender and profession, were not associated with the strength of these beliefs. (See Appendix M for service reaction and feedback).

The finding that experience of using session-by-session monitoring was associated with both higher positive and negative beliefs about its utility within clinical practice was unexpected. It may be that those using this practice are more aware of both positive and negative aspects of this way of working or may reflect that those currently utilising it are tending to do so in the absence of support structures. Interestingly, the findings indicated that there were stronger positive beliefs in both those who do and do not currently use this practice. These findings fit with recent research (Thew, Fountain, & Salkovskis, Manuscript in preparation) in secondary care adult mental health services which found that clinicians generally endorsed positive beliefs about measures more strongly than negative ones.

Limitations

Within the centre where the research was carried out, not all team members' participated (22% and 20% respectively). Similarly, the teams involved may not be representative of CAMHS nationally, though they did cover a diverse range of populations amongst them. Although the questionnaire had a good response rate overall, this was still smaller than ideal for factor analysis. Similarly, the pragmatic distinction made between those clinicians who reported never using session-by-session monitoring from those who have on some or many occasions may have resulted in bias, with professionals who 'almost never' use this clinical practice being included in the latter category. This could account for the unexpected findings that clinicians categorised as currently using session-by-session monitoring hold stronger positive and negative beliefs than those who do not. The study, therefore, would clearly benefit from replication across a bigger sample of services.

A strength of the present study was its use of mixed methods, there being complementarity between the use of focus groups and a questionnaire. Some clinicians, however, described feeling unable to complete the questionnaire due to

their lack of experience with session-by-session ROM, potentially creating a bias in the final sample. However, the final open question within the measure enabled them to express this. Further exploring professional's views following the implementation of session-by-session ROM could be of value.

Implications for practice and training

This study is the first to examine CAMHS clinician's use of and beliefs about session-by-session ROM, in line with the CYP-IAPT ethos. There is a previous study in this area, however, this looked at ROM from the view of lead clinicians within CAMHS (Johnston & Gowers, 2005), and indicated that resource shortfalls were the main obstacle to this way of working. Clearly this is from a different perspective and within the current study the items related to cost and technology could not be answered. Since completion of the study, the results have been fed back to the services involved and there is now a pilot project around session-by-session ROM in place.

The present study, being cross sectional, does not allow for a judgement to be made about causal relationships. Consequently, it may be hypothesised that the beliefs measured motivate ROM, the use of ROM may impact on beliefs, or, as seems more likely, both may be true as part of a reciprocal relationship. Therefore, a model creating a virtuous circle whereby positive beliefs motivate more frequent use of session-by-session ROM, which consequently reinforces these beliefs, would be most useful. This would be in preference to a similar inhibitory process whereby negative beliefs motivate reduced use of session-by-session ROM. A model facilitating positive beliefs may be made more likely through a process of enabling and supporting CAMHS teams to develop the use of session-by-session ROM within their clinical practice, as opposed to directives to implement this within routine work. Both these models and the processes best utilised to facilitate the use of session-by-session ROM in CAMHS needs to be further researched.

In terms of frameworks to understand this, psychological models of decision-making suggest that it is usually important to, firstly, understand why individuals hold positive and negative beliefs about a particular issue, and, secondly, increase the weight of positive beliefs and decrease negative beliefs by addressing important factors relevant to the decision. Wroe and Salkovskis (1999) suggest that in addition to a balance of pros and cons, decision making is linked to the accessibility of information at the time the decision is made. Theoretically, when applied to session-

by-session monitoring, this process of understanding and shifting the decisional balance should lead to better implementation of this way of working.

Beacon projects may be a helpful way of initially introducing session-by-session ROM, in order for services to learn and develop the most effective ways of using this clinical practice and understanding clinicians concerns further. This can then inform the on-going development and implementation of training and support systems to keep clinicians on board with this way of working. There is, however, a risk of tokenism within services required to adopt this approach and it will therefore be even more important for clinicians concerns to be further understood and addressed.

Suggestions for future research

Further research, with larger projects involving multiple CAMHS services, to explore clinician's beliefs about session-by-session ROM in relation to their current practice would be of benefit. Furthermore, experimental studies utilising cluster randomisation to focus on addressing clinician's beliefs about session-by-session ROM and the impact of implementing ROM within CAMHS may help define the best process for facilitating the use of this way of working in everyday clinical practice.

This study could also be extended by exploring children, young people, and their families' views and experience of session-by-session ROM. Only one previous study (Moran et al., 2012) has explored this, highlighting the importance of their involvement in the process of outcome measurement. Similarly, recent research in adult services (Thew et al., Manuscript in preparation) has suggested that service users perceptions of how well measures were used and integrated into therapy were strongly associated with how helpful they found measures as part of therapy overall. Future research further exploring young people's views of session-by-session ROM, the acceptability of this clinical practice and individual measures, and service user experience in relation to clinician's beliefs will be of value.

Conclusion

Despite its limitations, these findings suggest that session-by-session ROM is not currently routine practice within CAMHS and that those clinicians who currently use this way of working hold stronger positive and negative beliefs than those who do not. This, therefore, highlights the importance of considering how this practice can be best implemented within this setting.

Lay Summary – Session by Session Monitoring in CAMHS – What are Clinicians thoughts?

There is increasing emphasis within CAMHS on measuring progress with children, young people and their families. CYP-IAPT proposes a standard set of measures to track a child's goals, symptoms and feedback each session. This study aimed to understand what clinicians think about and how often they utilise session-by-session monitoring to help inform its implementation.

Focus groups with twelve CAMHS professionals discussed the potential pros and cons of session-by-session monitoring. Themes which emerged included this way of working providing objectivity, and being collaborative and empowering. Themes also illustrated concerns over how the information would be used and measures may influence therapeutic sessions. These themes informed development of a questionnaire designed to elicit clinician's current use of and beliefs about session-by-session monitoring.

Fifty-nine professionals from four CAMHS teams completed the final questionnaire. It was found that only 6.8% of participants reported "almost always" utilising session-by-session ROM, and that only 7% had received CYP-IAPT training. Questionnaire results suggested that clinicians who currently use session-by-session ROM hold stronger positive and negative beliefs than clinicians who do not. Whilst considering its limitations, this study suggests that session-by-session ROM is not currently routine practice within CAMHS and highlights the importance of considering how this practice can be best implemented within this setting.

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**Mindfulness-Based Cognitive Therapy versus self-help for
students with clinical perfectionism: A pilot randomised
study.**

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Journal to be targeted:

This paper is targeted towards Behaviour Research and Therapy, as this is a journal which focuses on cognitive behaviour therapy and the development and evaluation of empirically-supported interventions (see Appendix N for author guidelines).

Abstract

Objective

This pilot study compared a mindfulness-based cognitive therapy (MBCT) intervention with a self-help guide based on cognitive behaviour therapy (CBT) for students with clinical perfectionism.

Method

Participants were randomised to MBCT or self-help. Questionnaires were completed at baseline, eight weeks later (corresponding to the end of MBCT) and at ten-week follow-up.

Results

Post-intervention intention-to-treat (ITT) analyses identified that MBCT participants ($n = 28$) had significantly lower levels of unhealthy perfectionism and stress than self-help participants ($n = 32$). There was significant MBCT superiority for changes in unhelpful beliefs about emotions, rumination, mindfulness, self-compassion and decentering. At ten-week follow-up, effects were maintained in the MBCT group and both ITT and completer (per-protocol) analyses showed superior MBCT outcomes for unhealthy perfectionism and daily impairment caused by perfectionism. Mediation analysis showed that pre-post changes in self-compassion mediated the group differences in pre-post changes in clinical perfectionism.

Conclusions

MBCT is a promising intervention for students with clinical perfectionism, which may result in larger improvements than self-help. The findings require replication with a larger sample.

Introduction

Perfectionism has long been considered to be linked to psychological distress, with evidence that it can act as a risk or maintaining factor across psychological difficulties (Egan, Wade, & Shafran, 2011). Research with students has found that nearly two thirds can be categorised as perfectionists, with over a quarter considered maladaptive perfectionists (Grzegorek, Slaney, Franze, & Rice, 2004). Although striving for high standards is not usually problematic in itself (Shafran, Cooper, & Fairburn, 2002), unhealthy forms of perfectionism have been identified, known as 'negative' or 'clinical' perfectionism (Shafran & Mansell, 2001). This is often associated with self-criticism, fear of failure and negative evaluation by the self or others, alongside higher levels of distress and behavioural impairments (Campbell & Paula, 2002; Shafran et al., 2002; Slade & Owens, 1998).

A cognitive behavioural model (Shafran, Egan, & Wade, 2010) suggests that negatively-biased thinking patterns and behaviours (e.g. checking, avoidance and procrastination) maintain clinical perfectionism. Failure to meet excessively demanding self-imposed standards results in self-criticism and further counter-productive behaviours, and standards that are met are subsequently re-appraised as not being demanding enough. There is evidence consistent with suggestion that dichotomous thinking and dysfunctional standards are characteristic of negative perfectionism (Egan, Piek, Dyck, & Rees, 2007), and that perfectionists are more likely than non-perfectionists to raise their standards after success (Kobori, Hayakawa, & Tanno, 2009).

Evidence suggests that perfectionists are more likely than others to ruminate and that rumination mediates the relationship between maladaptive perfectionism and distress (Di Schiena, Luminet, Philippot, & Douilliez, 2012; Short & Mazmanian, 2013). Furthermore, there is preliminary evidence in individuals with chronic fatigue syndrome that unhealthy perfectionism is associated with perfectionist attitudes towards emotions, in particular beliefs that negative emotions are unacceptable and can lead to negative reactions by others (Rimes & Chalder, 2010). Such beliefs could lead to counter-productive attempts to suppress negative emotions or avoidance of seeking social support when distressed.

Perfectionist individuals also report lower levels of potentially helpful psychological processes such as self-compassion and mindfulness. Argus and Thompson (2008) found that mindful awareness mediated the positive association between

maladaptive perfectionism and depression severity, while Hinterman, Burns, Hopwood, and Rogers (2012) report a significant correlation between lack of mindfulness, negative perfectionism, depression and rumination. Neff (2003) found that students high in self-compassion showed lower perfectionism. Furthermore, a preparatory linked cross-sectional study (James, Rimes, & Verplanken, in preparation, see Appendix O for article) identified three factors from measures of rumination, unhelpful beliefs about emotions, self-critical thinking, self-compassion and mindfulness – self-criticism, self-compassion, and present-moment awareness. Both self-criticism and self-compassion mediated the relationship between unhealthy perfectionism and psychological distress.

Preliminary evidence suggests that CBT targeting perfectionism-specific unhelpful thinking patterns and behaviours can be beneficial (Pleva & Wade, 2007; Riley, Lee, Cooper, Fairburn, & Shafran, 2007; Steele & Wade, 2008; Steele et al., 2013). This form of intervention, however, does not specifically address processes such as self-compassion, mindfulness, rumination and unhelpful beliefs about emotions. In contrast, mindfulness-based approaches (MBA) apply a CBT model but also incorporate a mindfulness approach and practices with the specific aim of addressing such processes (Segal, Williams, & Teasdale, 2002). Indeed there is evidence that the effect of MBCT for recurrent depression is mediated by increases in self-compassion and mindfulness (Kuyken et al., 2010), and that MBA successfully reduce rumination (Heeren & Philippot, 2011; Michalak, Holz, & Teismann, 2011) and unhelpful beliefs about emotions (Rimes & Chalder, 2010), and increase a decentered perspective on thoughts (Teasdale et al., 2000).

MBA use various practices to increase the participants' present-moment awareness of ongoing experiences, including cognitive, emotional, physical and behavioural reactions. If individuals can notice unhelpful reactions, such as rumination or other unhelpful thinking patterns, at an early stage they have greater opportunity to respond differently. This approach could help perfectionists to notice unhelpful cognitive reactions, such as self-critical or dichotomous thinking, or behaviours, such as excessive checking or avoidance, earlier. Mindfulness participants also practice a decentered perspective on their thoughts in which these are experienced as passing internal events rather than assuming that they are accurate reflections of reality or the self. This increased meta-awareness could help perfectionists to observe negative thoughts about themselves or their performance without experiencing as much associated distress. Another aim of MBA is to help individuals

cultivate a more self-compassionate and accepting attitude towards themselves and their experiences, including difficult emotions, which may be particularly helpful for perfectionists characterised by self-critical and judgemental attitudes. Although such aspects of MBA may help perfectionists to address the unhelpful responses which maintain their difficulties, such an intervention specifically focused on perfectionism has not yet been evaluated.

In summary, there is preliminary evidence that perfectionist individuals tend to show higher levels of rumination and perfectionist beliefs about emotions, and lower levels of mindfulness and self-compassion. Addressing these processes may help reduce student's distress and impairments associated with unhealthy perfectionism. Therefore a pilot study was designed to explore the acceptability of an adapted version of MBCT for clinical perfectionism, based upon the original protocol (Segal et al., 2002), and feasibility for a larger-scale RCT. The adapted MBCT was compared with a cognitive behavioural self-help guide. This control condition was chosen because there were no resources to run additional MBCT for a waitlist design, it was considered ethically preferable to providing no treatment, it was anticipated that a no treatment control could result in high drop-out rates, and there is existing evidence for cognitive behavioural pure self-help with this population (e.g. Pleva & Wade, 2007).

It was hypothesised that:

- (1) MBCT participants would report lower post-treatment levels of unhealthy perfectionism and psychological distress than participants receiving self-help.
- (2) Post-intervention levels of rumination and unhelpful beliefs about emotions would be lower in those receiving MBCT than those receiving self-help, whereas levels of mindfulness, self-compassion, and decentering would be higher.

Exploratory analyses were also undertaken to examine whether changes on any of these process measures mediate group differences in changes in perfectionism.

Method

Design

A pilot RCT was undertaken, with participants randomised to MBCT ($n = 32$) or self-help ($n = 33$). Participants were assessed pre-intervention, immediately following the 8-week intervention and ten-week's post-intervention. The study protocol was

approved by the University of Bath Psychology Ethics Committee (Reference: 12-124) (see Appendix P) and King's College London Psychiatry, Nursing and Midwifery Research Ethics Subcommittee (Reference PNM/12/13-154) (see Appendix Q).

Participants

Participants were recruited through advertisements on university campuses, websites and circular emails (see Appendix R). The adverts sought to recruit students experiencing difficulties because of perfectionism or high standards.

Inclusion criteria were (a) being a student age 18 or over, (b) a total score of 22 or above on the Concern over Mistakes subscale of the Frost Multidimensional Perfectionism Scale (FMPS) (as used in previous research (Egan & Hine, 2008; Steele et al., 2013)), (c) reporting that perfectionism is causing significant distress or impairment in important areas of functioning, confirmed by the assessor via interview (d) having access to a GP, and (e) having proficient English. In addition, if potential participants were on anti-depressant medication, this was required to have been stable for three months. Exclusion criteria were (a) current significant suicidal ideation, (b) current psychological treatment for perfectionism, (c) meeting DSM-IV diagnostic criteria for substance dependence or an eating disorder. The flow of participants through the trial is depicted in Figure 2.

Outcome Measures (see Appendix S for measures)

For each measure, higher ratings indicate higher levels of the specific construct.

Acceptability and engagement

Measures of engagement for MBCT included class attendance and amount of home practice undertaken (minutes per day reported on home practice sheets).

Participants in both groups were asked to estimate the proportion (%) of hand-outs or booklet they had read, and how useful they had found the intervention, with response options of 'no use at all', 'quite useful', 'useful', 'moderately useful' and 'very useful'. Drop-out was also investigated as an indication of acceptability.

Perfectionism

The 35-item FMPS (Frost, Marten, Lahart, & Rosenblate, 1990), a widely used measure of perfectionism, was the primary outcome measure. Items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). There

are 6 subscales: Concern over Mistakes (COM), Personal Standards (PS), Parental Expectations (PE), Parental Criticism (PC), Doubts about Actions (DA), and Organisation (O). The subscales internal consistency ranges from .77 to .93 and it has good concurrent validity (Frost et al. 1990). In the present study, Cronbach's alphas were acceptable (i.e., .71 - .93). In line with previous research (Stumpf & Parker, 2000) the FMPS differentiated healthy and unhealthy perfectionism. Accordingly, the COM, DA, PE, and PC sub-scales were totalled to create the super-factor of unhealthy perfectionism, while PS and O sub-scales constitute healthy perfectionism.

Perfectionism was further assessed with the 12-item Clinical Perfectionism Questionnaire (CPQ) (Fairburn, Cooper, & Shafran, 2003), which assesses clinical perfectionism by rating the frequency of cognitive, behavioural, and affective aspects of goal setting and striving over the past month on a 4-point scale from 'not at all' to 'all of the time'. Cronbach's alpha was .75.

Impairment

The Work and Social Adjustment Scale (WASAS) (Mundt, Marks, Shear, & Greist, 2002) is a reliable and valid five-item scale assessing functional impairment in work, home management, social and private activities and relationships, which was adapted to ask about the impact of perfectionism. Responses range from 'not at all impaired' (0) to 'very severely impaired' (8). Cronbach's alpha was .78.

Stress, Anxiety and Depression

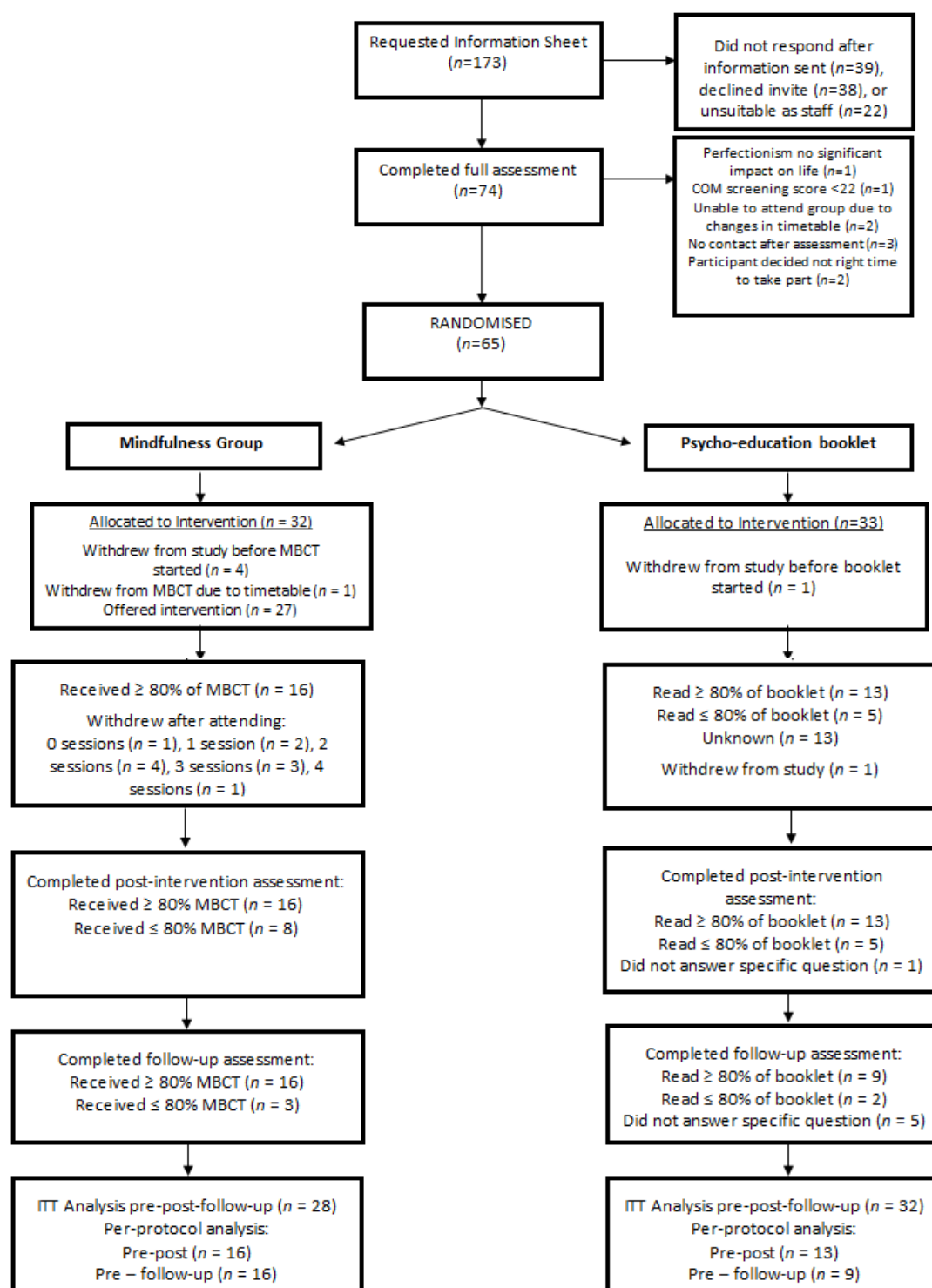
Levels of anxiety, stress and depression were assessed using the 21-item Depression Anxiety Stress Scale (DASS) (Henry & Crawford, 2005). Participants rate how much they have experienced symptoms of these difficulties over the past week - responses range from 'did not apply to me at all' (0) to 'applied to me very much, or most of the time' (3). Cronbach's alpha ranged from .82 to .91.

Mindfulness

The 39-item Five-Facet Mindfulness Questionnaire (FFMQ) (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006), developed based on a factor analytic study of five mindfulness questionnaires, is a reliable and valid scale. There are five factors: observing, describing, acting with awareness, non-judging of inner experience and non-reactivity to inner experience, and five response options from 'Never or very

Figure 2. CONSORT flow chart of participant recruitment to the trial.

MBCT, Mindfulness-based cognitive therapy; ITT, intention to treat.



rarely true' (1) to 'Very often or always true' (5). Cronbach's alpha ranged from .78 to .93.

Beliefs about Emotions

The 12-item Beliefs about Emotions Scale (BES) (Rimes & Chalder, 2010) assesses beliefs about the unacceptability of experiencing and expressing negative feelings. There are seven response options from 'Totally agree' (6) to 'Totally disagree' (0). A previous study found that the scale is reliable and valid (Rimes & Chalder, 2010). Cronbach's alpha was .88.

Self-Compassion

The 12-item Self-Compassion Scale (SCS) assesses self-compassion, and demonstrates adequate reliability and validity (Neff, 2003). Responses on a 5-point Likert scale range from 1 ('Almost never') to 5 ('Almost always'). There are six subscales: self-judgement, common humanity, isolation, mindfulness and over-identification. Mean scores are calculated for each subscale (reverse-scored where appropriate) and added to give a total score. Cronbach's alpha was 0.80

Decentering

The Experiences Questionnaire (Fresco et al., 2007) is an 11-item measure of decentering, demonstrating good internal consistency (.81 to .90), concurrent and discriminant validity (Fresco et al., 2007). Participants rate how much they currently have similar experiences to those described (e.g. 'I can actually see that I am not my thoughts'). Five response choices range from 'never' (0) to 'all the time' (4). Cronbach's alpha was .85.

Rumination

The Rumination Responses Questionnaire (RRQ) (Trapnell & Campbell, 1999) is a 12-item measure assessing rumination levels. Trapnell and Campbell (1999) report internal consistency coefficient estimates 0.90. Items are rated on a 5-point scale ranging from 0 ('strongly disagree') to 4 ('strongly agree'). Cronbach's alpha was .71

Interventions

MBCT Intervention

The structure and practices were adapted from the MBCT course for recurrent depression (Segal et al., 2002). There were eight weekly two-hour sessions and participants were invited to engage in home practice, with the use of recordings of

mindfulness exercises. Classes consisted of mindfulness meditation practices, enquiry, and the opportunity to discuss home practice, any obstacles or difficulties (for at least 1.5 hours of each session). As in standard MBCT, sessions one to four focused on helping participants learn to pay attention, and sessions five to eight on learning to handle negative thoughts or feelings. The programme was adapted so that psycho-educative and cognitive components were consistent with a cognitive behavioural model of perfectionism. In line with this, participants were provided with hand-outs from the self-help booklet to support the provision and discussion of psycho-education about perfectionism. Unlike standard MBCT, perfectionism was discussed every session and a loving-kindness meditation was incorporated within the programme due to the high levels of self-criticism within this population.

More specifically, the content of sessions one to three was broadly consistent with the standard MBCT protocol (with the addition of discussion about perfectionism and hand-outs from the self-help booklet). Session four adapted the psycho-education about depression to information about perfectionism and its common features in thoughts, feelings and behaviours, while session five incorporated information on 'rules for living' and the fight/flight response. Session six was adapted to highlight the role of self-critical thinking and explicitly focus on developing self-compassion and kindness towards the self. In session seven exercises were adapted to explore links between positive/negative activities and mood and the early warning signs of perfectionism, with psycho-education about recognising strengths and creating a balanced life. Session eight adapted the exercises on reviewing early warning signs and developing an action plan in order to focus on perfectionism rather than depression. Participants were offered a ten-week follow-up mindfulness class (two hours) that included mindfulness practices and enquiry, a review of participants' current mindfulness practice and future practice intentions.

The study took place in two different universities. 10 participants were randomised to MBCT at the University of Bath and 22 participants at King's College London. Both groups were led by an experienced MBCT instructor (KR) who met the requirements of the Good Practice Guidelines for Teaching Mindfulness-based Courses (UK Network of Mindfulness-based Teacher Trainers, 2010). The instructor was assisted in Bath by a clinical psychologist in training (KJ) and in London by a qualified clinical psychologist.

Pure self-help

Self-help guidance was provided in the form of a self-help booklet written by the authors for this study and specifically for use within a pure self-help format (see Appendix T). The content was based on existing cognitive behavioural approaches to perfectionism (e.g. Shafran, Egan & Wade, 2010), and aimed to be a concise, readable, and engaging booklet. The booklet used the same CBT model of perfectionism as the adapted MBCT (with the MBCT intervention utilising some of the booklet in hand-out form to support psycho-education and discussion of perfectionism). The booklet described how perfectionism can affect the way we think, act and feel, and outlined a CBT maintenance model. This was followed by sections aiming to help participants overcome unhelpful aspects of their perfectionism by addressing perfectionist thinking and behaviours, recognising strengths and creating a balanced life. Exercises were included throughout the booklet to encourage the application of information and learning to participants own individual circumstances (e.g. identifying one's unhelpful thoughts and behaviours). Participants were sent an electronic or hard copy of the booklet and encouraged to contact the researchers with any questions.

Procedure

Enquiring participants were sent the information sheet (see Appendix U) and invited to an assessment, which was face to face or telephone-based. Here they were able to ask questions and eligibility was assessed. Axis I psychiatric diagnoses were assessed with the Mini-International Neuropsychiatric Interview (Sheehan et al., 1998), a short interviewer-led structured diagnostic interview. Those that were assessed as eligible and agreed to participate gave written informed consent (see Appendix V). Self-report questionnaires were completed pre-intervention, at the end of the 8-week MBCT intervention, and at ten-week follow-up. Post-intervention all participants were invited to an interview (see Appendix W) to seek feedback on their intervention experience; analysis of this qualitative feedback will be reported separately.

Allocation Strategy

Randomisation was conducted by a researcher not involved in the study. A computer-generated randomisation sequence was prepared in sealed envelopes. Blocks of two were used to ensure each intervention was balanced. These envelopes remained concealed until assignment to the groups.

Power Calculations

This was a pilot study where the feasibility of recruiting students with unhealthy perfectionism was a research goal. In order to inform recruitment strategy, an a priori power calculation was undertaken using one of the secondary outcomes, self-compassion, which had been investigated in a previous MBCT study (Rimes & Wingrove, 2011). Using their reported partial $\eta^2 = 0.21$ power calculations using the programme g*power, with alpha set at 0.05 and power = 0.80, suggested a sample size of 32 (16 per condition).

Statistical methods

Preliminary analyses tested between-group comparability on demographic variables and outcome measures. Primary analysis compared the effects of MBCT with self-help utilising univariate ANCOVAs, in which the pre-treatment score on the respective outcome variable was entered as a covariate. The primary outcome was unhealthy perfectionism at post-treatment. Corrections were not made for multiple comparisons as this was a pilot study where it was important to identify possible effects that could be investigated in subsequent larger studies. These analyses were conducted on both per-protocol (PP) and intention-to-treat (ITT) samples. PP analysis included participants who attended $\geq 80\%$ of MBCT sessions or reported reading $\geq 80\%$ of the self-help guide. The conservative ITT procedure utilises data from all recruited participants providing pre- and post-intervention data, regardless of whether they completed treatment, with the last observations carried forward for missing data. Partial eta-squared (η^2) was calculated as a measure of effect size. Similar analyses were conducted for ten-week follow-up.

To assess whether group differences were reflected in outcomes for individual participants, the level of clinically significant change was calculated for the primary outcome measures of perfectionism (FMPQ unhealthy perfectionism and clinical perfectionism) and DASS-21 subscales using Jacobson and Truax's (1991) criteria. Since clinical norms have not yet been established for FMPQ unhealthy perfectionism, participants were classified as 'clinically significantly improved' if their post-treatment score was at least two standard deviations above the non-clinical mean identified in previous research (Dreary & Chalder, 2008). Jacobson & Truax's (1991) criteria for reliable and clinically significant change were then computed for the CPQ and DASS-21 subscales. The values used for the CPQ (Chang & Sanna, 2012; Riley et al., 2007) and DASS-21 (Crawford, Cayley, Lovibond, Wilson and Hartley, 2011; Antony, Bieling, Cox, Enns and Swinson, 1998) change calculations

were drawn from published psychometric data. Thomas & Truax's (2008) recommended categories of change were then used: recovered (reliable and clinically significant change), improved (reliable change without significant clinical change), same (no change) and deteriorated (reliable change with worsening symptoms). After categorising participants as 'recovered or improved' or 'same or deteriorated', Fisher's exact test was used to compare change between groups.

The bootstrapping method was used to investigate mediation, as advocated by Preacher and Hayes (2004). With this approach, mediation is investigated by directly testing the significance of the indirect effects of the independent variable (IV) on the dependent variable (DV) through a mediator (M). Bootstrapping is a nonparametric resampling procedure that involves repeatedly sampling from the data set and estimating the indirect effect in each resampled data set. By repeating this process 5000 times, 95% confidence intervals are constructed for the indirect effect. This method allows multiple mediators to be investigated, indicating the individual effects of each mediator, controlling for the other. Indirect effects were considered significant when the bias corrected and accelerated confidence intervals did not include zero.

Results

Participant Characteristics

The sample of 60 participants consisted of 70% post-graduate and 30% undergraduate students. Forty-nine participants were women (81.7%) and 11 men (18.3%), who were primarily British (76.66%), followed by other Asian (11.66%) and Ethnic backgrounds (11.66%). Ages ranged from 18 to 39, with a mean of 24.92 years ($SD = 4.72$). The majority of participants were single (60%), followed by those who were married (20%) or in a relationship with their partner living abroad (20%). Both chi square (all $\chi^2 p > .05$) and t-test analyses ($F_{(1, 58)} = 1.491, p = .227$) found no significant differences between the groups on any demographic variable or outcome/process measure.

Eight MBCT and 13 self-help participants met criteria for at least one MINI disorder. Five MBCT participants had one diagnosis, one participant had two diagnoses and two participants had three diagnoses. GAD was the most common difficulty for MBCT participants ($n = 5$), followed by major depression ($n = 3$), social phobia ($n = 2$), dysthymia ($n = 2$) and panic disorder ($n = 1$). Seven self-help participants had one diagnosis, four had two diagnoses and two had three diagnoses. GAD was the

most common difficulty for self-help participants ($n = 10$), followed by major depression ($n = 5$), social phobia ($n = 4$), bulimia ($n = 1$) and panic disorder ($n = 1$).

Acceptability and Engagement.

Completion and drop-out rates

Of 27 participants starting MBCT, 16 (59.3%) attended at least 80% of the sessions. The others attended 50% ($n = 1$), 37.5% ($n = 3$), 25% ($n = 4$), 12.5% ($n = 2$), and 0% ($n = 1$). The 16 who completed the MBCT attended a mean of 7.2 sessions out of 8. Of the 32 participants starting self-help, data was available from 18 about adherence to the self-help materials. Of these 18 participants, thirteen (66.7%) reported reading 80% ($n = 3$), 90% ($n = 4$) or 100% ($n = 6$) of the self-help booklet. Remaining participants read 70% ($n = 1$), 60% ($n = 2$), 50% ($n = 1$), and 30% ($n = 1$). Two participants completed post-intervention questionnaires but did not answer these questions on their booklet experience. Chi-square analyses comparing the proportion of MBCT and self-help participants who completed $\geq 80\%$ of the intervention suggested that there were no significant between-group differences ($\chi^2(1, n=94)=0.283, p=.595$).

Home practice and coursework

The mean total duration of weekly formal practice over MBCT, reported at post-treatment, was 109 minutes (SD = 46.69). The mean number of days of formal home meditation practice per week between MBCT sessions was 3.8 (SD = 1.25). For the 24 MBCT participants for whom data was available, fourteen (58.33%) participants reported reading 80 ($n = 4$), 90 ($n = 4$), or 100% ($n = 6$) of session hand-outs. The others reported reading 70% ($n = 2$), 60% ($n = 1$), 30% ($n = 1$), 20% ($n = 2$), and 10% ($n = 3$). One participant completed post-intervention questionnaires but did not answer these questions. For the self-help group, sixteen participants reported that the number of exercises completed ranged from one to nine (mean = 4.4, S.D. = 2.50). Three participants did not answer these questions.

Perceived usefulness of the interventions

All MBCT completers rated the course as useful, with 50% rating it as 'very useful'. Of those participants who completed post-intervention questionnaires, but did not complete the MBCT intervention, three rated it as 'quite useful', two as 'useful' and one as 'very useful'. One participant who attended two sessions reported that MBCT was 'no use at all', while one did not answer these questions. For the self-help group, seven participants rated the booklet as 'quite useful', six as 'useful' and four

as 'moderately useful', with no participants rating it as 'very useful'. Chi-square analyses (comparing those rating each intervention as either 'no use at all', 'quite useful', or 'useful' with those rating it as 'moderately useful' or 'very useful') showed that there were no significant between-group differences in the ratings of each interventions usefulness for those who completed the interventions ($\chi^2(1, n=28)=3.360, p=.067$), but that there were significant differences when including those who did not ($\chi^2(1, n=40)=6.667, p=.010$).

Group Differences at Post-Treatment

ITT

ITT ANCOVA's (see Table 1) showed that the MBCT group had significantly lower levels of unhealthy perfectionism, clinical perfectionism, and stress at post-treatment than the self-help group. There were no significant group differences in impairment in daily life, anxiety or depression. ANCOVAs with process measures showed that the MBCT group had significantly lower levels of unhelpful beliefs about emotions and rumination, and higher levels of mindfulness, self-compassion and decentering at post-treatment, in comparison with the self-help group. See Table 1 for means, standard deviations, and results of all ANCOVAs.

Per-protocol

PP ANCOVA's (see Table 1) showed that there were no significant group differences found in measures of perfectionism, impairment in daily life, depression or anxiety. In contrast, there were significant group differences on each of the five process measures.

Group Differences at 10-week follow-up

ITT

ITT ANCOVA's for ten-week follow-up found significantly lower unhealthy perfectionism, clinical perfectionism, and impairment in daily life in the MBCT than in the self-help group (see Table 2). There were no significant group differences in stress, anxiety, or depression. The MBCT group had significantly lower levels of unhelpful beliefs about emotions and rumination, and higher levels of mindfulness, self-compassion and decentering, in comparison with the self-help group. See Table 2 for means, standard deviations, and results of all ANCOVAs.

Per-protocol

PP ANCOVA's (see Table 2) for ten-week follow-up showed that the MBCT group had significantly lower unhealthy perfectionism and impairment in daily life than the self-help group. There were no significant group differences in clinical perfectionism, anxiety, depression or stress. For process measures, the MBCT group had better outcomes than the self-help group except for self-compassion, which showed no significant group difference.

Relationship between amount of MBCT home practice and change in psychological variables

Pearson's correlations showed that greater frequency of home practice per week was significantly correlated with larger increases in self-compassion ($r(17) = 0.509$, $p = 0.04$). Frequency of home practice per week was not significantly correlated with changes in other outcome or process measures (all $r < 0.245$).

Clinically significant individual change

ITT

Using ITT samples to calculate clinically significant improvement in FMPQ unhealthy perfectionism, 24 (86%) of MBCT participants and 23 (72%) of self-help participants were clinically significantly improved at post-treatment. At 10-week follow-up, 22 (79%) of MBCT and 19 (59%) of self-help participants met this criteria. Table 3 shows the percentage of participants who reliably recovered, improved, remained the same or deteriorated at post-treatment and 10-week follow-up. More MBCT than self-help participants achieved benefits (i.e. improved or recovered) across all outcomes at post-treatment, with similar findings at 10-week follow-up. However, between-group differences using the Fisher's exact test were significant for stress ($p < .05$) at post-treatment and 10-week follow-up only.

Per-protocol

Using PP samples to calculate clinically significant improvement in FMPQ unhealthy perfectionism, 15 (94%) of MBCT participants and 13 (100%) of self-help participants were clinically significantly improved at post-treatment. At 10-week follow-up, 14 (87.5%) of MBCT and 7 (77%) of self-help participants met this criteria. For the PP sample, more MBCT than self-help participants achieved benefits (i.e. improved or recovered) across all outcomes at post-treatment, with similar findings at 10-week follow-up for all outcomes except for depression, where more self-help participants improved or recovered. However, between-group

differences using the Fisher's exact test were significant for stress ($p < .05$) at post-treatment and clinical perfectionism at 10-week follow-up ($p < .05$) (see Table 4).

Table 1. Post-treatment: Mean scores, standard deviations and results of ANCOVA investigating between-group differences, adjusting for pre-treatment questionnaire scores.

Analysis/Measure	MBCT M (SD) (<i>n</i> = 28)		Self-help M (SD) (<i>n</i> = 32)		Group Difference		
	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	<i>F</i>	<i>p</i>	<i>Partial η</i> ²
Intention to Treat							
<i>Clinical Outcomes</i>							
Unhealthy Perfectionism	74.0 (12.5)	63.5 (13.8)	70.5 (13.6)	66.1 (13.7)	4.5	0.039	0.07
Clinical Perfectionism	29.4 (4.7)	25.8 (4.8)	28.0 (5.1)	27.4 (5.2)	4.3	0.044	0.07
Daily impairment by perfectionism	19.6 (8.3)	16.1 (9.6)	17.2 (7.71)	16.3 (8.4)	2.0	0.160	0.03
Anxiety	12.9 (9.0)	10.4 (9.6)	13.4 (10.5)	12.1 (9.8)	0.6	0.434	0.01
Depression	16.1 (12.1)	12.1 (12.6)	14.0 (10.3)	11.6 (9.7)	0.5	0.495	0.01
Stress	24.0 (10.2)	17.5 (11.4)	21.6 (9.6)	20.2 (9.9)	4.8	0.032	0.08
<i>Process Measures</i>							
Beliefs about emotions	59.7 (13.0)	51.6 (16.7)	61.4 (12.1)	61.5 (12.0)	10.1	0.002	0.15
Decentering	26.0 (6.7)	36.1 (8.4)	29.4 (5.3)	30.9 (5.8)	13.3	0.001	0.19
Rumination	35.2 (4.5)	29.2 (6.5)	33.7 (5.6)	32.7 (6.1)	16.5	0.001	0.24
Mindfulness	104.8 (18.4)	119.5 (19.9)	109.3 (17.1)	111.0 (14.5)	16.5	0.001	0.22
Self-compassion	2.0 (0.5)	2.7 (0.7)	2.3 (0.5)	2.4 (0.5)	8.6	0.005	0.13

Table 1 (*continued*)

Analysis/Measure	MBCT M (SD) (<i>n</i> = 28)		Self-help M (SD) (<i>n</i> = 32)		Group Difference		
	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	<i>F</i>	<i>p</i>	<i>Partial η</i> ²
Per-protocol							
<i>Clinical Outcomes</i>	<i>(n</i> = 16)		<i>(n</i> = 13)				
Unhealthy Perfectionism	76.3 (13.9)	61.1 (16.0)	66.6 (11.1)	58.8 (16.0)	1.5	0.233	0.05
Clinical Perfectionism	30.4 (4.9)	25.8 (5.3)	28.7 (5.7)	26.9 (5.7)	2.3	0.141	0.08
Daily impairment by perfectionism	19.0 (8.7)	15.8 (10.5)	16.5 (8.1)	16.1 (8.7)	1.2	0.289	0.04
Anxiety	13.9 (9.7)	10.5 (11.6)	11.4 (12.2)	10.0 (11.3)	0.2	0.697	0.01
Depression	15.3 (12.9)	9.0 (12.1)	16.1 (9.1)	10.2 (8.0)	0.0	0.830	0.002
Stress	24.9 (10.5)	14.8 (11.6)	20.9 (10.6)	18.6 (11.2)	3.6	0.068	0.12
<i>Process Measures</i>							
Beliefs about emotions	60.9 (14.5)	48.2 (18.4)	55.5 (11.6)	56.9 (11.4)	6.6	0.016	0.20
Decentering	36.3 (3.7)	27.8 (6.0)	32.8 (4.5)	31.8 (5.4)	15.4	0.001	0.37
Rumination	42.2 (5.0)	30.3 (9.3)	37.7 (7.4)	36.5 (8.6)	20.4	0.001	0.44
Mindfulness	104.7 (19.1)	127.8 (18.8)	114.5 (15.2)	115.8 (14.1)	19.1	0.001	0.42
Self-compassion	2.0 (0.5)	2.9 (0.7)	2.4 (0.6)	2.6 (0.5)	4.8	0.038	0.16

Table 2. Ten-week follow-up: Mean scores, standard deviations and results of ANCOVA investigating between-group differences at 10-week follow-up, adjusting for pre-treatment questionnaire scores.

Analysis/Measure	MBCT M (SD) (<i>n</i> = 28)			Self-help M (SD) (<i>n</i> = 32)			Group Difference		
	Pre-treatment	Post-treatment	Follow-Up	Pre-treatment	Post-treatment	Follow-Up	<i>F</i>	<i>p</i>	<i>Partial η</i> ²
Intention to treat									
<i>Clinical Outcomes</i>									
Unhealthy Perfectionism	74.0 (12.5)	63.5 (13.8)	63.4 (16.0)	70.5 (13.6)	66.1 (13.7)	68.2 (14.7)	6.2	0.016	0.098
Clinical Perfectionism	29.4 (4.7)	25.8 (4.8)	25.4 (4.3)	29.0 (5.1)	27.4 (5.2)	28.0 (5.6)	6.3	0.015	0.099
Daily impairment by perfectionism	19.6 (8.3)	16.1 (9.6)	15.6 (9.6)	17.2 (7.7)	16.3 (8.4)	18.2 (9.9)	5.2	0.026	0.084
Anxiety	12.9 (9.0)	10.4 (9.6)	10.1 (7.7)	13.4 (10.5)	12.1 (9.8)	11.8 (9.6)	0.7	0.42	0.011
Depression	16.1 (12.1)	12.1 (12.6)	13.2 (11.5)	14.0 (10.3)	11.6 (9.7)	13.4 (11.1)	0.5	0.477	0.009
Stress	24.0 (10.2)	17.5 (11.4)	18.8 (10.8)	21.6 (9.6)	20.3 (9.9)	21.1 (9.4)	1.8	0.189	0.03
<i>Process Measures</i>									
Beliefs about emotions	59.7 (13.0)	51.6 (16.7)	50.4 (14.9)	61.4 (12.1)	61.5 (12.0)	61.1 (11.8)	10.5	0.002	0.156
Decentering	26.0 (6.7)	36.1 (8.4)	34.1 (8.0)	29.4 (5.3)	30.9 (5.8)	30.8 (5.4)	6.1	0.017	0.097
Rumination	35.2 (4.5)	29.2 (6.5)	30.2 (5.9)	33.7 (5.6)	32.7 (6.1)	32.7 (6.8)	5.5	0.022	0.088
Mindfulness	104.8 (18.4)	119.5 (19.9)	119.5 (22.9)	109.3 (17.1)	111.0 (14.5)	111.6 (14.8)	7.6	0.008	0.118
Self-compassion	2.0 (0.5)	2.7 (0.7)	2.7 (0.8)	2.3 (0.5)	2.4 (0.5)	2.5 (0.7)	3.9	0.054	0.064

Table 2 (*continued*)

Analysis/Measure	MBCT M (SD) (<i>n</i> = 16)			Self-help M (SD) (<i>n</i> = 9)			Group Difference		
	Pre-treatment	Post-treatment	Follow-Up	Pre-treatment	Post-treatment	Follow-Up	<i>F</i>	<i>p</i>	<i>Partial η</i> ²
Per-protocol									
<i>Clinical Outcomes</i>									
Unhealthy Perfectionism	76.3 (13.9)	61.1 (16.0)	59.6 (18.4)	67.8 (11.7)	59.3 (8.5)	62.2 (12.1)	5.5	0.029	0.199
Clinical Perfectionism	30.4 (4.9)	25.8 (5.3)	24.6 (4.3)	29.1 (5.6)	27.0 (5.8)	27.9 (5.8)	3.8	0.064	0.148
Daily impairment by perfectionism	19.0 (8.7)	15.8 (10.5)	13.9 (9.5)	18.9 (7.6)	18.1 (7.2)	24.8 (8.5)	11.6	0.003	0.345
Anxiety	13.9 (9.7)	10.5 (11.6)	9.5 (8.7)	10.9 (11.9)	10.0 (12.2)	8.4 (10.4)	0.0	0.958	0.001
Depression	15.3 (12.9)	9.0 (12.1)	10.5 (10.9)	15.5 (8.0)	9.6 (8.0)	10.4 (10.9)	0.0	0.956	0.001
Stress	24.9 (10.5)	14.8 (11.6)	17.3 (10.6)	20.2 (10.1)	17.3 (11.6)	18.7 (9.4)	0.2	0.68	0.008
<i>Process Measures</i>									
Beliefs about emotions	60.9 (14.5)	48.2 (18.4)	45.7 (15.6)	52.0 (10.2)	56.3 (10.3)	57.1 (10.9)	6.1	0.022	0.216
Decentering	24.9 (7.3)	38.8 (8.9)	37.1 (8.3)	31.6 (6.7)	31.9 (4.0)	32.1 (4.5)	4.9	0.038	0.181
Rumination	36.2 (3.6)	28.2 (6.1)	28.8 (6.1)	32.8 (4.6)	31.8 (5.4)	32.8 (7.0)	4.3	0.050	0.157
Mindfulness	104.7 (19.1)	127.8 (18.8)	128.9 (23.1)	118.0 (16.4)	119.2 (11.8)	118.4 (14.0)	5.9	0.023	0.213
Self-compassion	2.0 (0.5)	2.9 (0.7)	3.1 (0.7)	2.5 (0.6)	2.5 (0.5)	2.7 (0.6)	2.1	0.158	0.089

Table 3. *Percentage of reliable and clinically significant change for both conditions on DASS-21 subscales in intention-to-treat sample.*

Measures	MBCT, <i>n</i> (%)				Self-Help, <i>n</i> (%)			
	Recovered	Improved	Same	Deteriorated	Recovered	Improved	Same	Deteriorated
Post-Treatment								
CPQ	8 (29)	0 (0)	20 (71)	0 (0)	4 (13)	0 (0)	28 (88)	0 (0)
DASS Depression	10 (36)	4 (14)	11 (39)	3 (11)	3 (9)	5 (16)	22 (69)	2 (6)
DASS Anxiety	3 (11)	3 (11)	22 (79)	0 (0)	3 (9)	2 (6)	26 (81)	1 (3)
DASS Stress*	5 (18)	10 (36)	10 (36)	3 (11)	3 (9)	3 (9)	24 (75)	2 (6)
10-week Follow-Up								
CPQ	10 (36)	0 (0)	18 (64)	0 (0)	4 (13)	0 (0)	27 (84)	1 (3)
DASS Depression	7 (25)	5 (18)	12 (43)	4 (14)	6 (19)	3 (9)	18 (56)	5 (16)
DASS Anxiety	3 (11)	5 (18)	18 (64)	2 (7)	3 (9)	4 (13)	22 (69)	3 (9)
DASS Stress*	3 (11)	9 (32)	14 (50)	2 (7)	0 (0)	6 (19)	22 (69)	4 (13)

*Fishers Exact Test

p<0.05

Table 4. *Percentage of reliable and clinically significant change for both conditions on DASS-21 subscales in per-protocol sample.*

Measures	MBCT, <i>n</i> (%)				Self-Help, <i>n</i> (%)			
	Recovered	Improved	Same	Deteriorated	Recovered	Improved	Same	Deteriorated
Post-Treatment								
CPQ	5 (31)	0 (0)	11 (69)	0 (0)	1 (8)	0 (0)	12 (92)	0 (0)
DASS Depression	7 (44)	3 (19)	5 (31)	1 (6)	2 (15)	4 (31)	6 (46)	1 (8)
DASS Anxiety	3 (19)	2 (13)	11 (69)	0 (0)	2 (15)	1 (8)	9 (69)	1 (8)
DASS Stress*	4 (25)	8 (50)	2 (13)	2 (13)	2 (15)	2 (15)	7 (54)	2 (15)
10-week Follow-Up								
CPQ*	9 (56)	0 (0)	7 (44)	0 (0)	1 (11)	0 (0)	8 (89)	0 (0)
DASS Depression	6 (35)	4 (24)	4 (24)	3 (18)	5 (56)	1 (11)	2 (22)	1 (11)
DASS Anxiety	3 (18)	4 (24)	8 (47)	2 (12)	1 (11)	2 (22)	5 (56)	1 (11)
DASS Stress	2 (12)	6 (35)	7 (41)	2 (12)	0 (0)	3 (33)	5 (56)	1 (11)

* Fishers Exact Test
p<0.05

Exploratory mechanisms of change

As significant differences were observed across all process measures between pre- and post-intervention, mediational analysis assessed whether changes in unhealthy perfectionism were due to changes in these hypothesised mechanisms. Mediation was investigated by deriving 95% CI for the indirect effect of group (MBCT vs. self-help) via the hypothesised mediators (change in mindfulness, self-compassion, unhelpful belief about emotions, decentering and rumination from pre- to post-intervention) on change in unhealthy (FMPS unhealthy perfectionism) and clinical perfectionism (CPQ). Separate mediation models were run for the two perfectionism measures.

Regression coefficient estimates and bias-corrected 95% confidence intervals for both models of mediation are presented in Table 3. Results indicated that change in self-compassion significantly mediated the relationship between group (MBCT vs. self-help) and changes in CPQ scores. Changes in remaining process measures were not found to be significant mediators.

Table 3. *Summary of multiple mediator model (5000 bootstraps) for changes in unhealthy and clinical perfectionism from pre-to-post intervention.*

Independent Variable	Mediating Variable	Dependent Variable	Effect of IV on M		Effect of M on DV		Direct Effect		Indirect Effect		95% CI		Total Effect	
IV	M	DV	(a)		(b)		(c1)		(a x b)		95% CI			
			Coeff	P	Coeff	p	Coeff	P	Coeff	p	Lower	Upper	Coeff	P
Group	Decentering	Unhealthy	-8.73	.0000	0.06	0.753	-1.01	0.701	-0.62	0.6871	-4.11	2.67	6.19	0.021
	Rumination	Perfectionism	4.90	.0001	0.26	0.459			1.28	0.4392	-3.13	5.95		
	Mindfulness		-13.13	.0001	0.09	0.441			1.21	0.4401	-3.11	4.74		
	Self-compassion		-0.53	.0006	-6.49	0.019			3.50	0.0341	-0.12	9.28		
	Beliefs about Emotions		8.29	.0042	0.22	0.066			1.82	0.0913	-0.03	4.89		
Group	Decentering	Clinical	-8.73	.0000	0.05	0.484	0.09	0.933	-0.58	0.3847	-2.82	0.99	2.15	0.044
	Rumination	Perfectionism	4.90	.0001	-0.01	0.950			-0.05	0.9470	-2.01	1.72		
	Mindfulness		-13.13	.0001	-0.04	0.413			0.44	0.5062	-1.60	2.56		
	Self-compassion		-0.53	.0006	-3.79	0.002			1.98	0.0120	0.27	4.35		
	Beliefs about Emotions		8.29	.0042	0.04	0.429			0.26	0.0144	-0.60	1.44		

Discussion

The present study is the first pilot RCT examining the effect of MBCT on unhealthy perfectionism. The study compared the acceptability and impact of an adapted MBCT intervention with a self-help psycho-educational booklet in a sample of students experiencing difficulties as a result of perfectionism.

Although perfectionism levels reduced in both groups, the ITT analyses found that MBCT participants had significantly lower levels of unhealthy perfectionism and stress at post-treatment than self-help participants, adjusting for baseline levels. Benefits were maintained at ten-week follow-up, at which point the MBCT group had lower levels of unhealthy perfectionism, clinical perfectionism and impairment caused by perfectionism than the self-help group. For the completer (PP) analysis, reductions in unhealthy perfectionism were greater in the MBCT group, but the group differences only reached statistical significance at ten-week follow-up, at which point the self-help participants' perfectionism had started to slightly increase again. Assessment of changes in perfectionism on an individual basis suggested that a higher percentage of MBCT than self-help participants had improved or recovered at post-treatment, although this was not statistically significant. PP analyses of clinical perfectionism at 10-week follow-up showed that a significantly higher proportion of MBCT participants were classified as 'recovered' or 'improved', but more self-help participants were classified as 'same' or 'deteriorated'. Overall, these findings suggest that the adapted MBCT shows promise as an intervention for those experiencing difficulties related to unhealthy perfectionism and is more beneficial than a self-help booklet.

The baseline level of unhealthy perfectionism (as measured by the COM subscale of the FMPS and CPQ) within the current student sample was similar to that of previous trials of CBT for perfectionism with community psychiatric outpatients (Egan & Hine, 2008; Glover, Brown, Fairburn, & Shafran, 2007; Steele & Wade, 2008; Steele et al., 2013). Although individuals in the current study were not seeking formal help for their difficulties, a third met diagnostic criteria for an Axis I difficulty, most commonly generalised anxiety disorder. This indicates that the strategy of targeting students for whom perfectionism is causing difficulties was effective in recruiting individuals who have significant distress or impairment.

For both ITT and PP analyses, the size of post-MBCT reductions in perfectionism, as measured by COM (3.7 and 4.6 points respectively) and the CPQ (6.7 and 10.3

points respectively), were similar to two previous studies of individual CBT (Pleva & Wade, 2007; Steele & Wade, 2008). Results comparable with these studies were also observed at ten-week follow-up. Only Riley et al.'s (2007) RCT of individual CBT reported larger reductions in perfectionism in ITT analyses at both post-treatment and follow-up. Although the present findings are preliminary, they suggest that an adapted MBCT group intervention can lead to reductions in unhealthy perfectionism, which are generally comparable to individual treatment approaches. When considering other group interventions designed specifically for perfectionism, a recent case series of group CBT (Steele et al., 2013) reported greater post-treatment reductions in both clinical perfectionism and COM than the present study. At ten-week follow-up, however, the current study observed greater reductions in clinical perfectionism compared to Steele et al.'s (2013) 3-month follow-up. This could suggest that MBCT skills and practice can be important for both maintaining and continuing to improve unhealthy perfectionism in the longer-term.

Potential mechanisms of change were also investigated, and both PP and ITT analyses suggested that the MBCT group had significantly lower levels of unhelpful beliefs about emotions and rumination, and higher levels of mindfulness, self-compassion and decentering at post-treatment, in comparison with the self-help group. Of these processes, there was evidence that self-compassion was particularly important, as changes in this process were found to mediate the group changes in clinical perfectionism. This is consistent with evidence of self-compassion as a mediator in MBCT for recurrent depression (Kuyken et al., 2010). These findings about the importance of self-compassion are also consistent with the results of the preparatory cross-sectional study (James, Rimes & Verplanken, in preparation) which identified a self-compassion factor and found that this mediated the relationship between unhealthy perfectionism and psychological distress. These findings suggest MBCT, which explicitly aims to help individuals develop protective self-compassion, could be of particular benefit for those experiencing difficulties as a result of clinical perfectionism.

Treatment completion for the MBCT was moderately good. Of those randomised to MBCT, 59.26% completed the course and displayed high rates of session attendance and homework completion. Those who did not complete MBCT primarily suggested that finding the time to commit to it was difficult, with many acknowledging that this was related to their perfectionism. This is consistent with recent research finding that despite identifying many negative consequences of

perfectionism, individuals also reported numerous benefits and preferred not to change their perfectionism (Egan, Piek, Dyck, Rees, & Hagger, 2013). However, the drop-out was greater than that reported by Steele et al (2013), perhaps because participants in that study were outpatients actively seeking help rather than students recruited for a research study. Although MBCT required attendance at eight two-hour classes and daily practice, and was therefore much more time consuming and less flexible than the self-help, treatment engagement was even lower in the self-help group, with only 13 of the 33 self-help participants reporting that they had read at least 80% of the self-help guide. Although this was not statistically different, this could relate to a power issue. The MBCT participants may have been willing to remain engaged despite the greater time involved because of the higher perceived usefulness or early impact of this intervention compared to the self-help.

Stress was significantly lower in the MBCT group at end of treatment, and although this did not reach significance at follow-up, it may have done so with a larger sample size. Assessment of changes in stress on an individual basis (for both ITT and PP analyses) showed that a significantly higher proportion of MBCT participants were classified as 'recovered' or 'improved' at post-treatment, but more self-help participants were classified as 'same' or 'deteriorated'. Both groups showed a slight increase in stress at ten-week follow-up, perhaps because this was the time of exams for some students. In contrast, depression and anxiety were not significantly different at post-treatment or follow-up, and levels of reliable and clinically significant individual change did not differ between groups. The relatively specific effects of a modified MBCT intervention was also noted in a trial of MBCT for health anxiety (McManus, Surawy, Muse, Vazquez-Montes & Williams, 2012) in which there was evidence of benefit of MBCT on measures of health anxiety but not general anxiety or depression.

Limitations of the study include drop-outs; only 71.6% of participants completed pre and post-intervention assessments. Although attrition in other studies with students have reported similar rates (Cavanagh et al., 2013; Collard, Avny, & Boniwell, 2008; Hassed, De Lisle, Sullivan, & Pier, 2009), levels of attrition within this population should be considered in future studies as this may affect statistical power and limit generalizability. As with many clinical trials, sole reliance on self-report data may have led to biases. Furthermore, both interventions were designed specifically for the study and were therefore previously untested. A strength of the study was the comparison of MBCT with an active control group (pure self-help), however, as

MBCT was a face-to-face group intervention non-specific factors such as therapist and social support or learning from the contributions of other participants may have influenced the results. Therefore, it cannot be concluded that it is necessarily the mindfulness component that is the key difference between the two groups; the possibility remains that the general aspects of group contact and support – rather than the mindfulness content of MBCT – led to the group differences. Future research could extend the study to provide guided self-help or a group-based CBT intervention in comparison with MBCT to help control for these factors. The study could be further improved by re-administering the MINI at post-intervention or follow-up to assess changes in co-morbid diagnoses.

In conclusion, this study suggests that MBCT shows promise as an intervention for students experiencing difficulties as a result of unhealthy perfectionism. Further research through a larger RCT is needed to extend the conclusions that can be drawn.

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Please see Appendix O for “Self-criticism and self-compassion as mediators in the relationship between unhealthy perfectionism and distress” article.

Executive Summary - Mindfulness-Based Cognitive Therapy versus self-help for students with clinical perfectionism: A pilot randomised study.

Perfectionism has long been considered to be linked to distress and has been highlighted as both a risk and maintaining factor across a range of psychological difficulties. A recently revised cognitive behavioural model (Shafran, Egan, & Wade, 2010) suggests that both negatively-biased thinking patterns and behaviours such as checking, avoidance and procrastination maintain the cycle of clinical perfectionism. Furthermore, preliminary evidence suggests that perfectionist individuals tend to show higher levels of rumination and perfectionist beliefs about emotions, and lower levels of mindfulness and self-compassion. Although the development of CBT specifically targeting perfectionism has grown in recent years, an intervention addressing these and other cognitive and behavioural processes may help reduce distress and impairments associated with unhealthy perfectionism.

This pilot study compared an adapted mindfulness-based cognitive therapy (MBCT) intervention with a self-help guide based on a cognitive behaviour therapy (CBT) approach for students with clinical perfectionism. The study aimed to explore the acceptability of this new intervention and preliminarily investigate the impact of both interventions. Participants were randomised to either MBCT or self-help and questionnaires were completed at baseline, eight weeks later (corresponding to the end of MBCT) and at ten-week follow-up.

Acceptability of the MBCT was moderately good, with 59.3% completing the course and displaying high rates of session attendance and homework completion. Those who did not complete MBCT primarily suggested that finding the time to commit to it was difficult, with many acknowledging that this was related to their perfectionism. Although the self-help was much less time-consuming than MBCT, treatment engagement was even lower in this group, with only 13 of the 33 self-help participants reporting that they had read at least 80% of the self-help booklet. The MBCT participants may have been willing to remain engaged despite the greater time involved because of the higher perceived usefulness of this intervention compared to the self-help.

Although perfectionism levels reduced in both groups, the intention-to-treat (ITT) analyses found that MBCT participants ($n = 28$) had significantly lower levels of unhealthy perfectionism and stress at post-treatment than self-help ($n = 32$)

participants. Benefits were maintained at ten-week follow-up, at which point the MBCT group had lower levels of unhealthy perfectionism, clinical perfectionism and impairment caused by perfectionism than the self-help group. Analyses, based only on those who completed the interventions, found that reductions in unhealthy perfectionism were greater in the MBCT group, but the group differences only reached statistical significance at ten-week follow-up, at which point the self-help participants' perfectionism had started to slightly increase again. This suggests that MBCT is a promising intervention for students with clinical perfectionism, which may result in larger improvements than self-help.

Analyses, both immediately after the interventions and at ten-week follow-up, also identified that MBCT participants showed significantly lower levels of rumination and unhelpful beliefs about emotions than self-help participants, and significantly higher levels of decentering, mindfulness and self-compassion. The emphasis on the cultivation of self-compassion may be particularly important for those with unhealthy perfectionism, as changes in this process were found to mediate the group changes in clinical perfectionism. These findings suggest that an approach, such as MBCT, which emphasises and explicitly aims to help individuals develop protective self-compassionate thinking processes and accompanying behaviours, could be of particular benefit for those experiencing difficulties as a result of clinical perfectionism.

Overall, this study suggests that MBCT is a promising intervention for students with clinical perfectionism, which may result in larger improvements than self-help. Further research through a larger RCT is needed to extend the conclusions that can be drawn.

Connecting Narrative

Teaching on the doctorate has consistently emphasised the use of validated measures throughout therapeutic interventions, both as a way of illustrating effectiveness, but also developing clinically meaningful conversations. My first placement within an IAPT service demonstrated this idea in practice, utilising session-by-session measures with all clients. However, other placements and cases have highlighted some of the difficulties with routinely implementing this clinical practice.

The idea for this project developed from a conversation with Dr. Sarah Elgie around the expansion of IAPT into CAMHS services, and how clinicians, young people and their families might experience aspects of this, including session-by-session outcome monitoring. For clinicians, in particular, this was in the context of their previous experience of CORC.

I appreciated the opportunity to visit a range of CAMHS teams and hear different perspectives on this clinical practice. This helped me further understand the positive, negative and neutral views that clinicians held about the area. This opportunity was facilitated and supported by those leading the services CYP-IAPT bid (Dr. Simon Bird and Barbara Hills). I valued being able to observe how those leading the bid facilitated conversations about the topic, despite having their own individual concerns. This experience also helped me build on my own skills in presenting and facilitating discussions within multi-disciplinary teams, and having the confidence to do this. These discussions helped me further appreciate the context that clinician's views were being shared within – one of increasing service demands and pressures. I therefore understood how the idea of incorporating a different way of working within every clinical session, in the absence of appropriate clinical and administrative support structures, would be concerning. While I had utilised session-by-session outcome monitoring in the absence of administrative support structures throughout my training, this was in the context of a training caseload, and support from clinical supervision. Experience throughout my IAPT placement helped me see the benefit of administrative support structures designed specifically with a service context in mind.

The results of this project highlighted that session-by-session outcome monitoring and its associated CYP-IAPT training is not currently routine practice within these

CAMHS teams. This highlighted the importance of training in the use of these outcome measures, alongside emphasising the use of clinical judgement as to its appropriateness on a case-by-case basis. It was also found that clinicians generally held stronger positive than negative beliefs about session-by-session outcome monitoring. On the basis of engaging with CAMHS teams on this topic, these results were unexpected by both myself and those within the service. This shows the importance of research in drawing attention to a different perspective and disseminating this information for discussion. Overall, these results helped to inform a pilot project on session-by-session outcome monitoring across the CAMHS teams.

As well as developing research knowledge and skills, the process of completing this project has enabled me to develop skills in facilitating groups, drawing together a wide range of ideas and views, and considering the range of factors influencing beliefs and seeing how research can result in service-level change. I feel that there is a lot of scope to develop further projects in this area, and would be particularly interested in exploring young people and their families' experiences of outcome monitoring. This project would likely require a more complex ethical process, which would help facilitate important areas for consideration. Completing this project has helped me reflect on the importance of outcome measures in everyday clinical practice, alongside considering the best ways for this to be utilised within individual services.

- This project was jointly developed with Dr. Sarah Elgie. There was no service-user consultation, however, relevant profession (e.g. CAMHS Psychology meeting) and team meetings were attended to further discuss the project design and feasibility. For example, discussions were had about carrying out initial interviews or focus groups to inform the development of a questionnaire. Further aspects were discussed such as the feasibility of visiting all CAMHS teams within the region. The project was also discussed with the Professional Lead for Psychology and those leading the CYP-IAPT bid for the host trust.
- Service evaluation approval was sought by Kirsty James and granted by North Bristol NHS trust audit committee, which was endorsed by the University of Bath Ethics Committee.
- Focus group content was jointly developed by Kirsty James, Sarah Elgie, Tracey Henderson and Joanna Adams, with the groups being facilitated by Kirsty James, Sarah Elgie and Tracey Henderson. This was arranged as

part of a team away day by Sarah Elgie. The transcription of the focus groups was completed by Kirsty James.

- The first draft of the quantitative questionnaire was developed by Kirsty James, on the basis of the focus group content and supervision with Sarah Elgie. This was jointly reviewed and finalised by Kirsty James, Sarah Elgie, Tracey Henderson and Joanna Adams.
- Attendance at CAMHS team meetings was jointly facilitated and supported by Kirsty James, Simon Bird and Barbara Hill (those leading the CYP-IAPT bid) through discussion with each CAMHS service manager.
- Quantitative data analysis was conducted by Kirsty James and Paul Salkovskis.
- The final manuscript was prepared by Kirsty James, with supervision from Paul Salkovskis and Joanna Adams. This was then reviewed by all authors.

Developing a project on session-by-session outcome monitoring also helped me consider the type, frequency and appropriateness of outcome measures in other projects I was completing. This was particularly useful when developing a pilot randomised control trial (RCT) comparing adapted MBCT for perfectionism with a psycho-educational self-help booklet. Reflecting on clinicians views on outcome measures helped me consider ways of discussing the rationale for outcome measures with potential participants. I was also mindful of offering each participant feedback on any questionnaires they completed, to ensure this was helpful for all involved.

Prior to starting training, I was working in an outpatient clinic in which therapeutic approaches, such as Dialectical Behaviour Therapy (DBT), Mindfulness-based Cognitive Therapy (MBCT) and Acceptance and Commitment Therapy (ACT), were utilised. These approaches emphasise mindfulness skills, which aim to help individuals non-judgementally pay attention to present experiences. Throughout my training I have become interested in the application of these skills across different difficulties and populations. Dr. Kate Rimes had a similar interest, and was particularly interested in how they might apply to difficulties associated with perfectionism. From here, the idea of exploring the relationships between aspects of mindfulness, perfectionism and distress, and subsequently adapting MBCT for perfectionism developed.

When proposing to conduct a pilot RCT, I was able to draw on knowledge and experience from previously working on RCTs. This was useful in being able to consider aspects of the research process including assessment, randomisation, and analysis. Although I understood at the outset that this was a sizable project, in practice it was at times difficult to manage. Similarly, it was challenging setting up and running, but also writing two articles (both a questionnaire-based study and pilot RCT) for this project due to the University word limits. It was during these times that I particularly appreciated and valued supervision. From this process I learnt the importance of considering the feasibility of a project and utilising tools, such as Gantt charts, in order to develop and outline a project schedule.

Both the process of writing the psycho-educational booklet and co-facilitating the adapted MBCT course enabled me to further develop my understanding of perfectionism and the variety of ways it can impact individuals. I found the opportunity to co-facilitate the MBCT group and observe an experienced MBCT instructor really valuable. This was particularly helpful for developing my own skills in conveying course themes through inquiry, didactic teaching and particular guided mindfulness practices. Engaging in research within this area also helped me reflect on my own aspects of perfectionism. I feel that I went through my own process of trying to differentiate healthy and unhealthy perfectionism, which I think mirrored MBCT participants experience. I feel this enabled me to help others differentiate a healthy pursuit of excellence in contrast with unachievable standards, or those that are only achievable with significantly negative consequences.

The relatively high drop-out rate observed throughout the project helped me reflect on aspects of the interventions or research process that may have contributed to this, and therefore what I might do differently in the future. There may have been aspects of the MBCT intervention which led to individuals feeling unable to continue participating, for example, the class size in the second group was 20 and this may have been too large. Alternatively, as the level of post-intervention questionnaire completion was similar across both groups, this may suggest that the number of outcome measures within the trial and therefore time required to complete these was too much. Differences in drop-out rates between the two sites may also have been influenced by the ability to meet face-to-face with those in Bath, while this was not possible in London. Alternatively, this may reflect something about those who experience difficulties associated with perfectionism, as some of the feedback received suggested that finding the time to commit to the course was challenging. In

the future I would therefore further consider the number of outcome measures included, the size of MBCT groups and emphasise the value of meeting face-to-face with participants.

- This project was jointly developed with Dr. Kate Rimes. There was no service-user consultation, however, the local University counselling services were consulted to discuss the frequency and presentation of difficulties with perfectionism.
- University ethical approval was sought by Kirsty James and Kate Rimes and granted by the University of Bath Ethics Committee and King's College London Psychiatry, Nursing and Midwifery Research Ethics Subcommittee.
- The online questionnaire study was co-supervised by Kate Rimes and Bas Verplanken.
- Both interventions were jointly developed by Kirsty James and Kate Rimes. However, Kirsty James took a lead on the booklet, and Kate Rimes on the MBCT adaptations.
- The assessment protocol was jointly developed by Kirsty James and Kate Rimes, with Kirsty James completing the assessments.
- Randomisation and questionnaire collation was conducted by Kate Roberts, a research assistant, at the University of Bath, and Kirsty James at Kings College London.
- Both MBCT groups were led by Kate Rimes, with Kirsty James co-facilitating the group in Bath and Antonia Dittner at KCL.
- Post-intervention interviews were conducted, transcribed and analysed by Kirsty James.
- Data analysis was conducted by Kirsty James, with supervision from Kate Rimes.
- The final manuscript was prepared by Kirsty James, with supervision from Kate Rimes and James Gregory.

My main research project revealed that a common co-morbid difficulty with perfectionism is Generalised Anxiety Disorder (GAD). This is understandable given that the difficulty often seen as the central feature of GAD – worry – is also common within perfectionism. The idea for this review was jointly developed with Dr. Claire Lomax, who has a research interest in the intolerance of uncertainty across anxiety disorders.

This was a very broad topic to review and, at times, I found it difficult to contain. This helped me reflect on the importance of specific inclusion and exclusion criteria within a literature review in order to support its feasibility. In the future, this will also help me consider the scope of literature reviews, and the importance of clearly defined terms to guide this.

While researching this review, it was interesting to reflect on how the criteria for GAD has changed considerably over time and think about what was influential within this and how this has led to difficulties in progressing our understanding. This was timely as GAD criteria were in the process of being revised in line with the publication of DSM-5. Although beyond the scope of the literature review, reading articles discussing these proposed changes and the rationale behind them helped me understand this process further. I felt that these types of articles were important to help both researchers and clinicians understand the justification for various changes, and how this might impact on both clinical research and practice.

Both this review and previous research have highlighted the focus of GAD literature on the adult population. The paucity of research with other populations across the lifespan, including children, adolescents and those in later life, helped me begin to consider whether current GAD criteria and theoretical models apply to these client groups. This also highlighted the potential importance of adopting a more systemic perspective in relation to factors that might contribute to the development and maintenance of GAD within these populations. This links with the finding highlighting the importance of further research focused on the role of attachment, both with differing caregivers and peers, and attending to the transactional nature of these relationships.

Overall, this review highlighted the limited understanding as to the factors that contribute to GAD developing and the variety in the focus on and explanation of such factors within current cognitive models. Conducting the review furthered my understanding of both the differences and similarities between these theoretical models and the subsequent impact on interventions. For example, the role of positive beliefs about worry is illustrated across a number of models, but how this is thought to be influential varies. By focusing on a specific area, completion of this review facilitated my understanding of the importance of theoretical developments in furthering research. It also aided my understanding of different research designs

and the importance of considering consistency of criteria and measures being applied.

- This project was jointly developed with Dr. Claire Lomax.
- The final manuscript was prepared by Kirsty James, with supervision from Claire Lomax.

These theory-practice links became evident in the single case studies that I have completed throughout clinical placements. For example, the cases of a 30-year-old male's experience of panic disorder and a 15-year-old girl's difficulties with social anxiety illustrated the use of session-by-session monitoring utilising standardised outcome measures in everyday clinical practice. However, the use of this approach was more difficult in the case of a 49-year-old with Down syndrome experiencing difficulties with low self-esteem, where we utilised an idiosyncratic outcome measure at sessions 8 and 22. This also highlighted the importance of considering at what point outcome measures are used within therapeutic interventions, as our initial sessions focused on developing the therapeutic relationship. As part of my development, I have also considered how outcome measures can be adapted for use in both group and multi-disciplinary team situations. Similarly, it was interesting to reflect on the criteria for different psychological difficulties in the context of a single case study when formulating 'Megan's' social anxiety, which could also have been formulated as specific phobia of vomiting or panic disorder.

Overall, completing each single case study on each clinical placement has highlighted the importance of drawing on psychological theory and the evidence base in clinical work in order to understand important areas to consider within assessment, formulation and intervention. I have been able to complete case studies on a range of psychological difficulties, which has developed my knowledge and skills in research designs, methods of assessment and ways of adapting interventions for different populations. It has also emphasised the importance of disseminating these findings, through peer-reviewed journals and conference presentations.

Future Research Aspirations

As a qualified clinical psychologist, I have aspirations to continue contributing to the research literature. I feel that my experiences of developing and conducting

research projects, as well as producing clinical case studies, have helped me to establish skills as a scientist-practitioner that can help support this ambition. I consider it important to continue developing and utilising these skills throughout my career. The clinical doctorate has provided opportunities to attend and present at national conferences and continuing to contribute in this way feels important to help develop clinical knowledge, share experience with other clinicians, and demonstrate the application of theory-practice links. Dissemination through local opportunities is also important to contribute to service-level changes and continuing professional development.

I therefore feel that in developing my career after training, it is important to consider the emphasis that is placed on research and service evaluation within services and the support and supervision provided. This will be in the context of NHS services which are under increasing pressures and demands, therefore time and funding for research opportunities is likely to be limited. Maintaining contact and continued professional development with the clinical doctorate course team may help support this. Alongside this, linking with existing local research networks may provide collaborative opportunities. Furthermore, developing further skills in writing research grants and applications may support this, and lead to service evaluations and developments. Being an advocate for the application of audit, evaluation, and research may also contribute to the development of a culture within services that values research.

Acknowledgements

There are many people I would like to acknowledge. Firstly, my supervisors across each research project: Dr. Kate Rimes, Professor Bas Verplanken, Dr. Sarah Elgie, Dr. Joanna Adams, Dr. Tracey Henderson, Professor Paul Salkovskis, and Dr. Claire Lomax. I would like to thank each person for the guidance, support and understanding they have provided over the past three years as they have all helped me develop as a Clinical Psychologist. Particular thanks to Dr. Kate Rimes who shared her skills and knowledge (as well as much time and effort!) to help me achieve an ambitious research study.

There are several other people I would like to thank for helping this work come together. Thank you to Kate Roberts and Antonia Dittner for helping to organise and run the RCT, and Dr. Simon Bird and Barbara Hill for facilitating attendance at CAMHS meetings. I also extend my thanks to those who participated in these projects– without them there would be nothing to report! Thanks also to my supervisors on each clinical placement for supporting and encouraging research-practice links: Alison Sedgwick-Taylor, Gill Turnbull, Dr. Kate Millican, Linda Walz, Dr. Claire Cheswick, Dr. Sarah Elgie, Dr. Tracey Henderson, Dr. Sam Phillips, and Dr. Kieran Spence.

Next, to the wonderful colleagues and friends I have made with those I have completed training with. Thank you for all your friendship, support and cakes – I couldn't have asked for a better group of people to train with!

Finally, thank you to my friends and family. Thank you to my Mum, Dad and sisters, Suzanne and Nicole, for your encouragement over the past three years. Thank you especially to Matt, for his love, support, proof reading, and chocolate... and putting up with me on my stressful days!

Thank you!

APPENDIX A - Literature Review

Clinical Psychology Review Author Guidelines



CLINICAL PSYCHOLOGY REVIEW

AUTHOR INFORMATION PACK

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ISSN: 0272-7358

DESCRIPTION

Clinical Psychology Review publishes substantive reviews of topics germane to **clinical psychology**. Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

Reviews on other topics, such as psychophysiology, learning therapy, experimental psychopathology, and social psychology often appear if they have a clear relationship to research or practice in **clinical psychology**. Integrative literature reviews and summary reports of innovative ongoing clinical research programs are also sometimes published. Reports on individual research studies and theoretical treatises or clinical guides without an empirical base are not appropriate.

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AUDIENCE

Psychologists and Clinicians in Psychopathy

IMPACT FACTOR

2012: 6.696 © Thomson Reuters Journal Citation Reports 2013

APPENDIX B - Literature Review

Highlights for Clinical Psychology Review

- (1) We explore our existing understanding of risk factors involved in the aetiology of worry and GAD
- (2) We review how well current cognitive models account for identified aetiological factors
- (3) Current cognitive models vary in their focus on, and explanation of, aetiological factors of worry and GAD and require further theoretical development
- (4) Further research focused on parenting, life events and the course of symptoms across gender and the lifespan will be beneficial.

APPENDIX C – Service Improvement Project

The Cognitive Behaviour Therapist Author Guidelines

CAMBRIDGE | Instructions for Contributors

the Cognitive Behaviour Therapist

Editor:

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Faramarz Hashempour, University of Bangor

Rachel Handley, University of Exeter

Natalie Taylor-Kerr, Isle of Man

Peter Langdon, University of East Anglia

Aims and Scope

the Cognitive Behaviour Therapist is an interdisciplinary peer reviewed journal aimed primarily at cognitive and behavioural practitioners in the helping and teaching professions. Published online, the journal features articles covering clinical and professional issues, which contribute to the theory, practice and evolution of the cognitive and behavioural therapies. The journal will publish papers that describe new developments; articles that are practice focussed and detail clinical interventions, research reports concerning the practice of cognitive behaviour therapy, detailed case reports, audits that are relevant to practice, and reviews of clinical scales and other assessment methods. The journal will also publish articles that have an education, training or supervision focus. It will also include reviews of recently published literature that is directly relevant to practitioners. A particular feature of the journal

APPENDIX D – Service Improvement Project

Learning Objectives & Article Summary for The Cognitive Behaviour Therapist

Learning Objectives

- 1) To understand CAMHS clinician's attitudes and beliefs about the use of session-by-session routine outcome monitoring (ROM) in clinical practice
- 2) To explore clinicians views about session-by-session ROM through focus groups
- 3) To assess the characteristics of a questionnaire developed to elicit information about professionals demographic characteristics, attitudes towards, and current use of, session-by-session ROM
- 4) To consider the impact clinicians beliefs may have on the implementation of ROM

Summary/Main Points

- There is increasing emphasis within CAMHS on measuring progress with children, young people and their families.
- This study aimed to understand what clinicians think about and how often they utilise session-by-session ROM to help inform its implementation.
- Themes which emerged from focus groups included this way of working providing objectivity, and being collaborative and empowering. Themes also illustrated concerns over how the information would be used and measures may influence therapeutic sessions.
- Questionnaire responses of 59 CAMHS professionals found that only 6.8% of participants reported “almost always” utilising session-by-session ROM and that only 7% had received CYP-IAPT training.
- Questionnaire responses also suggested that clinicians who currently use session-by-session ROM hold stronger positive and negative beliefs than clinicians who do not.
- This study highlights the importance of considering how this practice can be best implemented within CAMHS services.

Recommended Reading

Johnston, C., & Gowers, S. (2005). Routine outcome measurement: a survey of UK child and adolescent mental health services. *Child and Adolescent Mental Health*, 10(3), 133-139.

Moran, P., Kelesidi, K., Guglani, S., Davidson, S., & Ford, T. (2012). What do parents and carers think about routine outcome measures and their use? A focus group study of CAMHS attenders. *Clinical Child Psychology and Psychiatry*, 17(1), 65-79.

Bickman, L., Kelley, S., Breda, C., de, A. A., & Riemer, M. (2011). Effects of routine feedback to clinicians on mental health outcomes of youths: results of a randomized trial. *Psychiatr Serv.*, 62(12), 1423-1429.

APPENDIX E – Service Improvement Project

NHS & University of Bath Ethical Approval

RE: Research Enquiry

Gemma Oakes [Gemma.Oakes@nbt.nhs.uk]

Sent: 11 December 2012 12:05

To: James Kirsty (TAUNTON AND SOMERSET NHS FOUNDATION TRUST)

Dear Kirsty

After further investigation and discussion with regard to your project, I confirm that your project does not fit the criteria to be classified as research nor as part of quality audit. Your project therefore falls within service evaluation, and the only registration that is necessary for this project from our point of view is registration with your General Manager to ensure they are happy for you to run this project.

My apologies for the delay in reaching this decision.

Let me know if you need anything further, otherwise I wish you good luck with your service evaluation project.

Kind regards
Gem

Gemma Oakes
Research Governance Administrator
Research & Innovation
North Bristol NHS Trust

Floor 3 | Learning & Research building | Southmead Hospital | Westbury-on-Trym | Bristol | BS10 5NB

T: 0117 323 5209 | F: 0117 323 6192 | <http://www.nbt.nhs.uk/research>

Date: 07/02/2013 08:41:47 BST

From: Kirsty James <k.m.james@bath.ac.uk>

To: Helen Lucey <H.Lucey@bath.ac.uk>

Cc: kirsty.james@nhs.net, Caroline Ransford <C.A.Ransford@bath.ac.uk>

Bcc: kirsty471@yahoo.co.uk

Subject: Re: Ethics 13-015

Dear Helen,

Thank you for your email and comments regarding my application for ethical approval.

With regards to your question around NHS approval - I have previously contacted North Bristol NHS Trust's (the hosting trust) Research & Innovation Department, who have confirmed that the project would be classified as a Service Evaluation and that these types of project do not need ethical approval. I hope that this is sufficient, but please let me know if you need any further information.

With regards to your points on the focus group consent form and confidentiality issues - I appreciate your comments and have amended the consent form in line with them (attached). Being more explicit about some ground rules and the importance of confidentiality at the beginning of the focus group is a helpful idea - I will

incorporate this into the focus group introduction.

If there is any further information that you need on either of the above, please let me know.

Many Thanks,

Kirsty

Kirsty James
Clinical Psychologist in Training
University of Bath
Claverton Down,
Bath, BA7 4AY

Quoting Helen Lucey <H.Lucey@bath.ac.uk>:

Dear Kirsty James

Reference Number 13-015

The ethics committee have considered your application for the study entitled 'Session by session outcome monitoring in children and adolescents mental health services: therapist beliefs' and have given it conditional ethical approval.

The committee have raised the following points which they would like you to attend to before giving the study full ethical approval:

1. Can you let us know what kind of NHS approval your study needs - whether full ethical or Research and Development approval?
2. Anonymity issues are necessarily more complicated when conducting focus groups because the participants may be known to one another (and will at least know one another by sight during/after the group) . So on the focus group consent form it is a bit misleading to state 'There is no way we are able or intend to know your identity'. It's probably more correct to say that you will anonymise the data by changing all identifiable information on the transcripts (names, places, and anything else that comes up that could identify a person). Of course, this doesn't get around the ethical issue that all the people in the group will know what has been said. Perhaps you could think about setting some ground rules at the start of the group and talk about the importance of confidentiality then.

Please remember that you may not collect any data until you have ethical approval.

Yours sincerely

Helen Lucey
Chair of Psychology Ethics Committee

APPENDIX F – Service Improvement Project
Focus Group Information Sheet & Consent Form

INFORMATION SHEET

SESSION BY SESSION OUTCOME MONITORING IN CAMHS

You are being invited to take part in a research study. Before you decide whether you would like to take part, you need to understand why the research is being done and what it would involve. Please take time to read the following information carefully.

If there is anything that is not clear, or if you would like more information, please do not hesitate to contact Kirsty James (k.m.james@bath.ac.uk). Thank you for reading this.

What is the purpose of this study?

The Improving Access to Psychological Therapies (IAPT) programme has recently been extended to children and young people (CYP-IAPT). CYP-IAPT aims to re-design existing CAMHS services, incorporating session-by-session routine outcome monitoring by both IAPT trained and non-IAPT trained clinicians (Wolpert et al., 2012). This study is designed to explore CAMHS clinicians' beliefs about session-by-session outcome monitoring.

What will I have to do if I take part?

We are asking CAMHS clinicians to initially participate in focus groups to explore views on the area of session by session monitoring further. A well-established exercise will be used to facilitate group discussion on the topic. These groups will last approximately one hour and will be held at a convenient location. The group will be recorded to help me remember everything that we talk about. You will be asked to complete a consent form to say that you are happy with this.

What will happen to the recording afterwards?

The recording will be kept in a secure location and destroyed after the research is completed. This project will be written up, but your contribution will remain anonymous.

Do I have to take part?

No, and if you do decide to take part you can change your mind at any time.

Ethical Approval

This study has been approved by the University of Bath Psychology Ethics Committee. If you have questions about your rights as a participant in this research, you can contact the Chair of the Ethics Committee, Department of Psychology, University of Bath, Claverton Down, Bath, BA2 7AY, phone: (01225) 383061.

For further information

If you would like any further information about the research, please do not hesitate to contact Kirsty James (K.M.James@bath.ac.uk).

Thank you for taking time to read this information.

FOCUS GROUP CONSENT FORM

Session by session outcome monitoring in Children and Adolescent Mental Health Services (CAMHS).

WELCOME TO THIS FOCUS GROUP

Thank you for your interest in this research which is investigating ways that CAMHS clinicians view session-by-session routine outcome measurements. Your participation is greatly appreciated. The focus group is part of a research project at the Department of Psychology at the University of Bath, UK. The study has received approval from the Departmental Ethical Committee (IRB; reference number 13-015).

The focus group will last approximately one hour. Before taking part in this study, please read the consent section and proceed by signing at the bottom of the page, if you wish to do so.

CONTACT INFORMATION

Kirsty James, Dept of Psychology, University of Bath (UK), email: K.M.James@bath.ac.uk

CONSENT

We confirm that all data will be strictly anonymous, and will be treated with full confidentiality. All data will be made anonymous by changing all identifiable information. Please be honest when answering. You are free to withdraw from the study at any time. Participation is entirely voluntary. There are no foreseeable risks in participation in the study. Your participation will benefit clinical practice and psychological research.

If you understand these statements and freely consent to participate in the study please continue signing below. At the end of the focus group you will be provided with an opportunity to give comments.

_____ Participant name	_____ Date	_____ Signature
_____ Researcher name	_____ Date	_____ Signature

APPENDIX G – Service Improvement Project

Focus Group Structure

Focus Groups Structure

- * Begin the slot on the away day with a brief introduction of the project and set-up the focus groups (approx. 10 minutes)

- * Split the team into 3 smaller groups and each facilitate a group discussion on the topic.

- * Group discussion to focus on five key topics/areas:
 - (1) potential pros of session-by-session monitoring for clients
 - (2) potential pros of session-by-session monitoring for clinicians
 - (3) potential cons of session-by-session monitoring for clients
 - (4) potential cons of session-by-session monitoring for clinicians
 - (5) creative ways to implement session-by-session monitoring.
- * Try to come up with a visual prompt/reminder of each of the discussion areas/topics to try to keep people focused on this.

- * We can then ask groups to feedback on creative ways to implement this practice.

APPENDIX H – Service Improvement Project

Questionnaire Consent Form

QUESTIONNAIRE CONSENT FORM

**Session by session outcome monitoring in
Children and Adolescent Mental Health Services (CAMHS).**

WELCOME TO THIS QUESTIONNAIRE

Thank you for your interest in this research which is investigating ways that CAMHS clinicians view session-by-session routine outcome measurements. Your participation is greatly appreciated. The survey is part of a research project at the Department of Psychology at the University of Bath, UK. The study has received approval from the Departmental Ethical Committee (IRB; reference number 13-015).

It takes about 5-10 minutes to complete this questionnaire. Before taking part in this study, please read the consent section and proceed by signing at the bottom of the page, if you wish to do so.

CONTACT INFORMATION

Kirsty James, Dept of Psychology, University of Bath (UK), email: K.M.James@bath.ac.uk

CONSENT

We confirm that all data will be strictly anonymous, and will be treated with full confidentiality. There is no way we are able or intend to know your identity. Please be honest when answering. You are free to withdraw from the study at any time. Participation is entirely voluntary. There are no foreseeable risks in participation in the study. Your participation will benefit clinical practice and psychological research.

If you understand these statements and freely consent to participate in the study please continue signing below. At the end of this questionnaire you will be provided with an opportunity to give comments.

_____ Participant name	_____ Date	_____ Signature
_____ Researcher name	_____ Date	_____ Signature

APPENDIX I – Service Improvement Project

Session-by-Session Outcome Monitoring Final Questionnaire

Session by Session Monitoring - Professionals Views

This questionnaire is about thoughts that CAMHS clinicians can have about session-by-session monitoring. Please read each statement carefully and indicate how strongly you agree with that statement by circling the number that corresponds for you, from 1 (not at all) to 5 (totally).

Profession: _____

Number of years CAMHS experience (please circle): 0 – 5 years 5 – 10 years 10+ years

Gender: Male Female

Age : Under 20 20 – 30 31 – 40 41 – 50 51 – 60 61 or above

Ethnicity: _____

<i>Session-by-session monitoring...</i>	Not at all	Only a little	Somewhat	Quite a bit	Totally
1. ...provides clinicians with an objective view of whether progress has been made over time	1	2	3	4	5
2. ...wastes time in sessions	1	2	3	4	5
3. ...encourages feedback between the clinician and young person	1	2	3	4	5
4. ...and form filling implicitly interrupts the therapeutic relationship	1	2	3	4	5
5. ...encourages the young person to take responsibility for making change	1	2	3	4	5
6. ...is helpful as it measures individual clinician performance	1	2	3	4	5
7. ...helps clinicians understand what the young person wants to change	1	2	3	4	5
8. ...takes too much time to complete	1	2	3	4	5
9. ...helps keep BOTH the clinician and client focused on the goal of therapy	1	2	3	4	5
10. ...is nothing more than a paper filling exercise	1	2	3	4	5
11. ...has no value for clinicians	1	2	3	4	5
12. ...is quick and easy to use	1	2	3	4	5
13. ...is another job for clinicians to take on	1	2	3	4	5
14. ...is helpful for showing commissioners that services are	1	2	3	4	5

effective					
15. ...does not accurately reflect reality for the client	1	2	3	4	5
16. ...is not sensitive to change	1	2	3	4	5
17. ...is a collaborative way of working with a young person	1	2	3	4	5
18. ...works well with technology to support it	1	2	3	4	5
<i>Session-by-session monitoring...</i>	Not at all	Only a little	Somewhat	Quite a bit	Totally
19. ...is unhelpful without comprehensive training on how to administer and meaningfully interpret the measure	1	2	3	4	5
20. ...may provide a young person with another way to feedback their views to clinicians	1	2	3	4	5
21. ...costs too much to use	1	2	3	4	5
22. ...does not fit with more complex cases	1	2	3	4	5
23. ...might be difficult for all children to complete	1	2	3	4	5
24. ...if used meaningfully is helpful clinically	1	2	3	4	5
25. ...is too prescriptive for clinicians	1	2	3	4	5
26. ...is helpful if there are a limited number of measures	1	2	3	4	5

How often do you **currently** use session-by-session monitoring in your clinical practice?

1	2	3	4	5
Never				Almost Always

Have you received any CYP-IAPT training? Yes No

Do you have any other comments on the statements above or session-by-session monitoring?

Thank you for taking the time to complete this questionnaire

APPENDIX J – Service Improvement Project

Scree Plot for Exploratory Factor Analysis

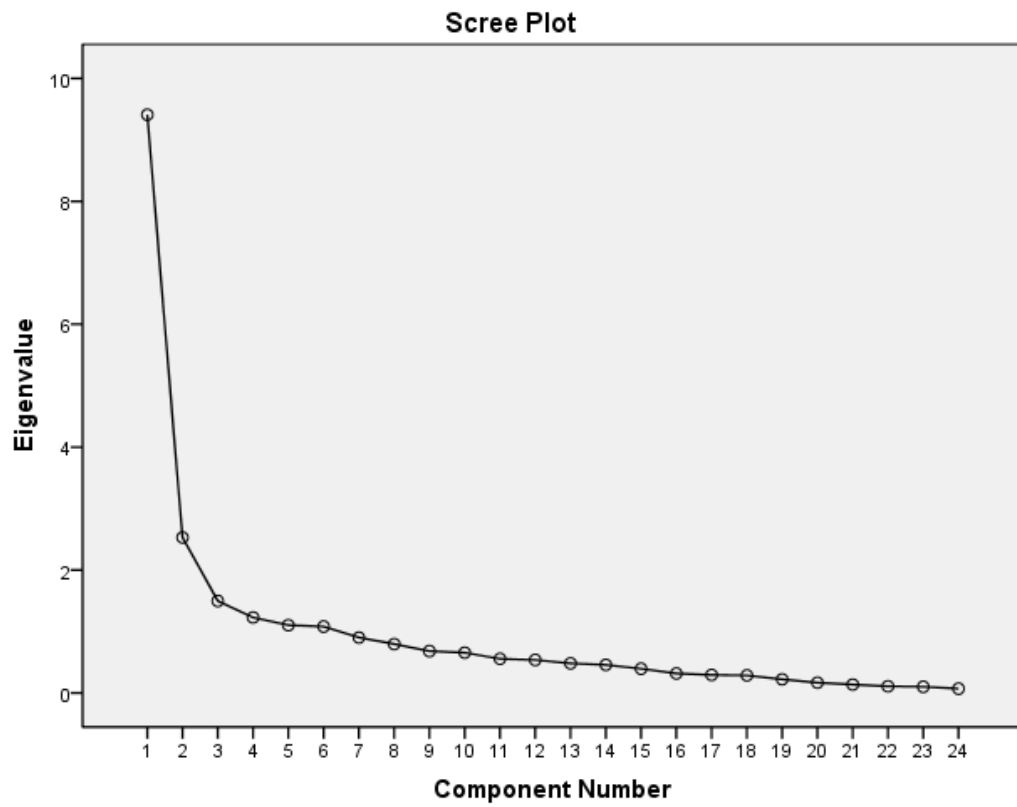


Figure 1. Scree Plot for Exploratory Factor Analysis

APPENDIX K – Service Improvement Project

Table detailing factor loadings for all questionnaire items.

Questionnaire Items	Factor Loading					
	1	2	3	4	5	6
(8) ...takes too much time to complete	0.814	0.134	0.128		-0.255	
(2) ...wastes time in sessions	0.754			0.225		
(4) ...and form filling implicitly interrupts the therapeutic relationship	0.744		0.171	0.373	0.2	
(25) ...is too prescriptive for clinicians	0.729	0.302		0.102	0.244	0.214
(13) ...is another job for clinicians to take on	0.671	0.227		-0.125	0.432	0.202
(22) ...does not fit with more complex cases	0.649		0.218	0.245	0.105	
(12) ...is quick and easy to use	0.547	0.513	0.199	-0.207	-0.158	0.202
(10) ...is nothing more than a paper filling exercise	0.53	0.464		0.108	0.43	0.258
(23) ...might be difficult for all children to complete	0.527	0.216	0.155	0.177	0.474	0.125
(3) ...encourages feedback between the clinician and young person		0.775	0.119			
(24) ...if used meaningfully is helpful clinically	0.101	0.762	0.154	0.143	0.149	
(17) ...is a collaborative way of working with a young person	0.182	0.725	0.308	0.41	0.144	
(9) ...helps keep BOTH the clinician and client focused on the goal of therapy	0.291	0.714	0.383	0.141	0.213	
(11) ...has no value for clinicians (reverse scored)	0.446	0.698			0.182	0.128
(7) ...helps clinicians understand what the young person wants to change		0.613	0.55	0.142		0.165
(5) ...encourages the young person to take responsibility for making change	0.185	0.124	0.765	0.101	0.109	
(6) ...is helpful as it measures individual clinician performance	0.154	0.245	0.625			0.343
(1) ...provides clinicians with an objective view of whether progress has been made over time	0.148	0.505	0.554		0.26	0.137
(15) ...does not accurately reflect reality for the client	0.414	0.131		0.678	0.114	0.271
(20) ...may provide a young person with another way to feedback their views to clinicians	0.174	0.484	0.216	0.556	0.162	-0.178
(16) ...is not sensitive to change	0.222	0.205	0.356	0.425	-0.395	-0.249
(26) ...is helpful if there are a limited number of measures		0.289	0.41	0.143	0.659	-0.101
(19) ...is unhelpful without comprehensive training on how to administer and meaningfully interpret the measure	0.118					0.811
(14) ...is helpful for showing commissioners that services are effective	0.101	0.323	0.284	0.522		0.548

APPENDIX L – Service Improvement Project

Frequency Table for CAMHS Professionals Current use of Session-by-Session Outcome monitoring

		Frequency			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	Never	34	57.6	61.8	61.8
	2.00	13	22.0	23.6	85.5
	3.00	3	5.1	5.5	90.9
	4.00	1	1.7	1.8	92.7
	Always	4	6.8	7.3	100.0
	Total	55	93.2	100.0	
Missing	System	4	6.8		
Total		59	100.0		

APPENDIX M – Service Improvement Project

Service reaction & Feedback, CAMHS Research Day Presentation

Service Reaction & Feedback

The findings were presented to members of the four CAMHS teams through a presentation at the trust's CAMHS research day (see following PowerPoint presentation). This presentation was received well and led to discussions around many areas relevant to session-by-session ROM. Discussion around the positive beliefs led to clinicians sharing their positive experiences of implementing session-by-session ROM and the value that this practice has had for them in building therapeutic relationships, raising awareness of clients who may drop-out of interventions, and in setting treatment goals. Discussion of the stronger positive beliefs for those who do currently utilise this clinical practice encouraged clinicians who do not use this way of working to volunteer to try it within a trust-wide CAMHS pilot project of session-by-session ROM.

Discussion of the negative thoughts around session-by-session ROM led to further debate about their use with complex cases and the necessity for the time and IT infrastructure to support this way of working. Clinicians leading the CYP-IAPT bid were able to confirm upcoming training, alongside the implementation of both a new database system to support its implementation and technology, such as tablets, to aid its clinical utility. This, again, is in line with the CAMHS pilot project, partly informed by these findings.

Session by session monitoring in CAMHS: What are Clinicians thoughts?

Kirsty James & Sarah Elgie
South Gloucestershire CAMHS
University of Bath

Background to the study

- Changing culture with an increasing emphasis on monitoring and measurement of progress
- Interested in understanding what clinicians' thoughts are around routine monitoring of clients progress
- If clinicians are largely positive in their thinking, more routine measurement of progress is likely to be well implemented
- If clinicians are largely negative, likely to present tensions and a reluctance to incorporate this new approach into day to day practice
- If we understand clinician's thoughts / concerns, we have an opportunity to address these and find solutions so that routine monitoring can be introduced into CAMHS with the support of clinicians

What is Session by Session Monitoring?

- IAPT proposes using a standard set of measures to monitor & track a client's progress on a session-by-session basis
- Measures include:
 - RCADS (assessing anxiety and depression) and / or another disorder specific measure
 - Goal Progress Chart or Outcome Rating Scale
 - 'How was this meeting' measure

Why introduce Session by Session Monitoring in CAMHS?

- SBS monitoring is required in CAMHS to...
 - Evaluate an intervention's effectiveness
 - Show commissioners a service's clinical value
 - Encourage service user involvement
 - Service Development
 - Enhance Clinical Practice

Evidence Base for Session by Session Monitoring with Adults

- Adult IAPT successfully incorporated session-by-session ROM (Clark, 2011)
- Significance of missing data at post-treatment (Clark et al., 2009)
- Evidence for benefits of frequent feedback of symptoms & satisfaction on treatment outcomes & retention rates, (Lambert et al., 2002; Kraus et al., 2009; Shimokawa et al., 2010; Lambert & Shimokawa, 2011).

Evidence that SBS Monitoring in CAMHS improves client's outcome

- In RCT, YP whose clinicians had weekly feedback improved faster than those whose clinicians did not (Bickman, Kelley, Brada, de, & Ramey, 2011)
- Families who reported discussion of weekly feedback at higher rates also described enhanced therapeutic relationships & child functioning (Stein, Kogan, Hudson, Magee, & Sorensen, 2010).

Results

High levels of missing data for items...

- "Works well with technology to support it"
- "costs too much to use"

Key Negative Thoughts

- "takes too much time to complete"
- "wastes time in sessions"
- "is another job for clinicians to take on"
- "and form filling implicitly interrupts the therapeutic relationship"
- "is too prescriptive for clinicians"
- "does not fit with more complex cases"

Key Positive Thoughts

- "has value for clinicians"
- "if used meaningfully is helpful clinically"
- "encourages feedback between the clinician and young person"
- "is a collaborative way of working with a young person"
- "helps keep BOTH the clinician and client focused on the goal of therapy"
- "helps clinicians understand what the young person wants to change"

Do Clinicians hold more positive or negative thoughts?

Negative Thoughts

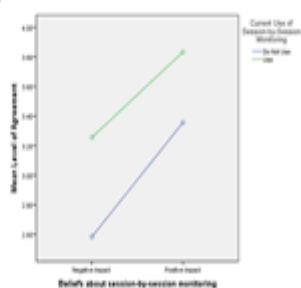
- "takes too much time to complete" - 3.1
- "wastes time in sessions" - 2.7
- "is another job for clinicians to take on" - 2.3
- "and form filling implicitly interrupts the therapeutic relationship" - 2.2
- "is too prescriptive for clinicians" - 2.7
- "does not fit with more complex cases" - 2.3

Positive Thoughts

- "has value for clinicians" - 4.0
- "if used meaningfully is helpful clinically" - 3.4
- "encourages feedback between the clinician and young person" - 3.6
- "is a collaborative way of working with a young person" - 3.3
- "helps keep BOTH the clinician and client focused on the goal of therapy" - 3.3
- "helps clinicians understand what the young person wants to change" - 3.1

Not at all	Only a little	Somewhat	Quite a bit	Totally
1	2	3	4	5

Influence of current use of session-by-session ROM on beliefs



Conclusions

- Clinicians hold as many positive as negative thoughts about SBS monitoring
- Overall, positive thoughts held with greater strength
- Positive thoughts identified that clinicians believe SBS can be valuable, especially if used meaningfully. SB also keeps therapy goal focused and encourages client feedback.

Conclusion

- Negative thoughts mainly referred to concerns with regards to (1) time, (2) relevance to complex cases and (3) impact on the therapeutic relationship
- Experience of using SSS clinically tends to strengthen both positive and negative beliefs
- In other words, if SSS is to be implemented successfully by GPs, we need to address the concerns of clinicians as these concerns only grow with use of SSS
- How can concerns about time implications be addressed or minimised e.g. could the forms be completed in the waiting room, online at home

Conclusions continued

- Can future research investigate whether clients find some measures more helpful than others and if the measures pack could be reviewed or modified to be more time efficient?
- Can future research investigate if there is validity to clinicians concerns that SSS interrupts the therapeutic relationship?
- If clinicians are concerned the measures are not suitable for complex cases, how could complex cases more usefully be monitored session by session?
- However, it is important to remember too, that the more clinicians use SSS, the more they feel they keep on track with client's goals, work collaboratively and find them a valuable tool.

Any Questions?

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Appendix N – Main Research Project

Behaviour Research and Therapy Author Guidelines



BEHAVIOUR RESEARCH AND THERAPY

AUTHOR INFORMATION PACK

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DESCRIPTION

Behaviour Research and Therapy encompasses all of what is commonly referred to as **cognitive behaviour therapy** (CBT). The focus is on the following: theoretical and experimental analyses of **psychopathological processes** with direct implications for prevention and treatment; the development and evaluation of empirically-supported interventions; predictors, moderators and mechanisms of behaviour change; and dissemination and implementation of evidence-based treatments to general clinical practice. In addition to traditional **clinical disorders**, the scope of the journal also includes **behavioural medicine**. The journal will not consider manuscripts dealing primarily with measurement, psychometric analyses, and personality assessment.

The **Editor and Associate Editors** will make an initial determination of whether or not **submissions** fall within the scope of the journal and/or are of sufficient merit and importance to warrant full review.

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IMPACT FACTOR

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Appendix O – Main Research Project

**‘Self-criticism and self-compassion as mediators in the relationship between
unhealthy perfectionism and distress’ Article**

Self-criticism and self-compassion as mediators in the relationship between unhealthy perfectionism and distress.

Kirsty James

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Internal Supervisors: Kate Rimes & Bas Verplanken

Word Count: 4,947

May 2014

Journal to be targeted:

This article is targeted towards the Journal of Personality & Individual Differences as this is a journal which publishes articles aiming to contribute to our understanding of psychological processes and has previously published work related to unhealthy perfectionism.

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Abstract

Unhealthy or negative perfectionism has been identified as both a risk and maintaining factor for a range of psychological difficulties. This cross-sectional online study with a predominantly student population ($n = 381$) investigated cognitive processes suggested to mediate the relationship between unhealthy perfectionism and distress. Hypothesised cognitive processes were assessed using questionnaires about rumination, self-critical thinking, unhelpful beliefs about emotions, self-compassion and mindfulness. Factor analysis of these questionnaires suggested three distinct underlying constructs, labelled as self-criticism, self-compassion and present-moment awareness. Higher levels of self-criticism and lower levels of self-compassion were associated with unhealthy perfectionism and psychological distress, and partially mediated this relationship. Present-moment awareness was not associated with unhealthy perfectionism or distress. These findings are consistent with the possibility that repetitive or habitual self-critical thinking and reduced self-compassion are two processes through which the personality characteristic of unhealthy perfectionism may result in greater distress. However, this requires further investigation using prospective or experimental designs.

Keywords: Perfectionism, self-criticism, self-compassion

Introduction

The construct of perfectionism is one that is still debated, with some conceptualisations emphasising its multidimensional nature (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991), and others focusing on it as a single construct (Shafran, Cooper, & Fairburn, 2002). Multidimensional definitions often highlight adaptive and maladaptive aspects. For example, 'perfectionistic striving', characterised by setting and striving for high standards, is often viewed as more adaptive, healthy or positive, whereas 'perfectionistic concern' including self-criticism, fear of failure and negative evaluation by the self or others is frequently viewed as the unhealthy or negative side of perfectionism (Stoeber & Otto, 2006). Bearing similarities to 'unhealthy' or 'negative' perfectionism, 'clinical perfectionism' has been defined as the overdependence of self-worth on the pursuit and achievement of personally demanding, self-imposed standards, despite adverse consequences (Shafran et al., 2002). Perfectionism has been conceptualised as a transdiagnostic risk and maintaining factor for a range of psychological problems such as eating disorders and depression (Egan, Wade, & Shafran, 2011). Unhealthy forms of perfectionism have also been found to be associated with increased suicidal behaviour (Hunter & O'Connor, 2003), and reduced response to psychological interventions (Blatt, Zuroff, Bondi, Sanislow III, & Pilkonis, 1998). Given the association between unhealthy perfectionism and psychological distress, further research aiming to understand both the risk and protective processes underlying this relationship is required (Bardone-Cone et al., 2007).

Cognitive processes which may mediate the relationship between perfectionism and distress

Self-criticism is a process consistently emphasised in models of perfectionism (Blatt, 1995; Hewitt & Flett, 1991). Previous research has found evidence consistent with the suggestion that the relationship between perfectionism and depression, anxiety and eating disorder symptomatology is accounted for by self-criticism (Dunkley, Blankstein, Masheb, & Grilo, 2006). However, self-critical thinking has often been measured using a depression scale (the Depressive Experiences Questionnaire; Blatt, D'Afflitti, & Quinlan, 1976) which may be influenced by mood. The finding that self-criticism may mediate the relationship between perfectionism and distress requires replication using a scale of habitual self-criticism that is not part of a depression scale.

A growing evidence base suggests a strong association between rumination and unhealthy perfectionism, with perfectionist individuals reporting higher levels of rumination than others (O'Connor, O'Connor, & Marshall, 2007). Furthermore, evidence has suggested that the tendency to ruminate, in particular a brooding ruminative response style, mediates the relationship between maladaptive perfectionism and depressive symptoms (Di Schiena, Luminet, Philippot, & Douilliez, 2012), negative affect (Short & Mazmanian, 2013), and social anxiety (Nepon, Flett, Hewitt, & Molnar, 2011). Ruminative processing may involve self-criticism so studying them together in the same study would help to identify whether ruminative processing adds anything unique or additional in the relationship between perfectionism and distress.

Beliefs about the unacceptability of experiencing or expressing negative thoughts and emotions have been suggested to play a role in the development and maintenance of psychological and somatic symptoms (Surawy, Hackmann, Hawton, & Sharpe, 1995). Rimes and Chalder (2010) suggest that these types of beliefs could be viewed as a form of excessively high standards or perfectionism focused on emotional experience and expression. In developing a measure to assess such beliefs, Rimes and Chalder (2010) found preliminary evidence that these perfectionist attitudes towards emotions correlated with unhealthy perfectionism. Such beliefs may lead to counter-productive attempts to suppress negative emotions or avoidance of seeking social support in times of distress.

In summary, self-critical thinking, rumination and perfectionist beliefs about emotions have all been proposed as processes by which perfectionism may be associated with increased distress. However, these are overlapping constructs and it would be helpful to examine them simultaneously within a single study to help us further understand the nature of their contribution in the mediation between unhealthy perfectionism and distress.

Protective processes in the relationship between perfectionism and distress

Research has also started to explore potentially helpful psychological processes and behaviours, which may act as protective factors and decrease the possibility that unhealthy perfectionism will lead to psychological distress. Mindfulness has recently been hypothesised as one such protective factor. This is described as a process of deliberately and non-judgementally attending to the present moment experience, without distraction from thoughts of the past or future (Baer, 2003). The

concept has been formulated as both a dispositional characteristic and a skill that can be learned and practiced, and is associated with decreased distress (Short & Mazmanian, 2013). Lundh (2004) has hypothesised that perfectionism becomes unhealthy when striving for high standards becomes a demand and individuals demonstrate an inability to accept things as they are at present, which is a core component of mindfulness. Furthermore, it has been argued that mindfulness may serve as a protective factor in the perfectionism-distress relationship by providing skills to interrupt repetitive unhelpful thinking patterns, such as rumination (Short & Mazmanian, 2013).

Argus and Thompson (2008) found that mindful awareness fully mediated the positive association between maladaptive perfectionism and depression severity in inpatients experiencing clinical depression. Furthermore, Short and Mazmanian (2013) found that rumination mediated the relationship between perfectionism and negative affect in students who were low in mindfulness but not those who were high in mindfulness, consistent with the possibility that mindfulness may be a protective factor for distress relating to perfectionism.

Self-compassion is often viewed as a key component within mindfulness (Kuyken et al., 2010) but is gaining increasing research attention within its own right (Neff, 2003a, 2003b). Self-compassion has been found to predict emotional and cognitive reactions to negative everyday events and, when imagining distressing social events, buffer against negative self-feelings (Leary, Tate, Adams, Batts Allen, & Hancock, 2007). Although limited, existing research has found that self-compassion is associated with lower levels of psychological distress and rumination and that those students high in self-compassion show lower levels of perfectionism (Neff, 2003a). However, the overlap between self-compassion and mindfulness means that it would be useful to examine these factors together in the same study to help us understand whether they make unique contributions in buffering the impact of perfectionism on distress.

The Present Study

The purpose of the current study was to investigate rumination, unhelpful beliefs about emotions, habitual self-critical thinking, mindfulness and self-compassion as possible mediators in the relationship between perfectionism and psychological distress. Unlike most previous studies, these potential mediators were investigated simultaneously. As they are overlapping constructs, factor analysis was first

undertaken to identify underlying factors, before mediational analyses were conducted.

Method

Design

A cross-sectional, questionnaire-based design was utilised. The study protocol was approved by the University of Bath Psychology Ethics Committee (Reference: 12-124).

Participants

An opportunity sample of participants were recruited ($n = 381$) via electronic advertisements on the internet. The age range for the sample was 18 – 68 years ($M = 27.92$; $SD = 11.11$). The sample was predominantly single (56.7%), female (79.5%), and from the USA or Canada (69.6%). The majority of participants were students, consisting of those at school or high-school (5.3%), and undergraduate (61.7%) or postgraduate (10.8%) study.

Measures

For each measure, higher ratings indicate higher levels of the specific construct.

Frost MultiDimensional Perfectionism (FMPS) (Frost et al., 1990)

This 35-item questionnaire is a widely used reliable and valid measure of perfectionism (Frost et al., 1990), and was the primary outcome measure. Items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). There are 6 subscales: Concern over Mistakes (CM) (e.g., I should be upset if I make a mistake), Personal Standards (PS) (e.g., I set higher goals than most people), Parental Expectations (PE) (e.g., My parents set very high standards for me), Parental Criticism (PC) (e.g., As a child, I was punished for doing things less than perfect), Doubts about Actions (DA) (e.g., It takes me a long time to do something “right”), and Organisation (O) (e.g., Organisation is very important to me), with the latter subscale excluded in scoring the total scale. In line with previous research (Stumpf & Parker, 2000) the FMPS was used to differentiate healthy and unhealthy perfectionism. Accordingly, the CM, DA, PE, and PC sub-scales were totalled to create the super-factor of unhealthy perfectionism, while PS and O sub-scales were totalled to constitute healthy perfectionism. Cronbach’s alpha was .71.

Self-Compassion Scale (SCS) – Short Form (Neff, 2003a)

This 12-item scale assesses features of self-compassion on a 5-point Likert scale ranging from 1 ('Almost never') to 5 ('Almost always'). There are six sub-scales: Self-Kindness (e.g., When I'm going through a very hard time, I give myself the caring and tenderness I need), Self-judgement (e.g., I'm disapproving and judgmental about my own flaws and inadequacies), Common Humanity (e.g., I try to see my failings as part of the human condition), Isolation (e.g., When I fail at something that's important to me, I tend to feel alone in my failure), Mindfulness (e.g., When something upsets me I try to keep my emotions in balance) and Over-identification (e.g., When I'm feeling down I tend to obsess and fixate on everything that's wrong). The mean scores are calculated for each subscale. The scale demonstrates adequate reliability and validity (Neff, 2003a). Cronbach's alphas for the present study ranged from .55 to .85.

Depression, Anxiety & Stress Scale (DASS-21) (Henry & Crawford, 2005)

Symptoms of anxiety, stress and depression were assessed using this 21-item scale, as has been utilised in previous studies of perfectionism (Pleva & Wade, 2007; Steele & Wade, 2008; Steele et al., 2013). Participants are asked to rate how much they have experienced symptoms of these difficulties over the past week, with responses ranging from 'did not apply to me at all' (0) to 'applied to me very much, or most of the time' (3). Cronbach's alphas ranged from .82 to .91 in the present study. The total of depression, anxiety and stress sub-scales was used to indicate current level of psychological distress, as it has in previous studies (Steele et al., 2013).

Beliefs about Emotions Scale (BES) (Rimes & Chalder, 2010)

This 12-item scale assesses beliefs about the unacceptability of experiencing and expressing negative feelings (e.g., 'It is a sign of weakness if I have miserable thoughts', 'To be acceptable to others, I must keep any difficulties or negative feelings to myself'). There are seven response options from 'Totally agree' (6) to 'Totally disagree' (0). Higher scores indicate more unhelpful beliefs. A previous study found that the scale is reliable and valid (Rimes & Chalder, 2010). Cronbach's alpha was .89.

Rumination Responses Questionnaire (RRQ) (Trapnell & Campbell, 1999)

This is a 12-item measure assessing levels of rumination (e.g. 'I tend to "ruminate" or dwell over things that happen to me for a really long time afterward'). Trapnell

and Campbell (1999) report internal consistency coefficient estimates 0.90. Items are rated on a 5-point scale ranging from 0 ('strongly disagree') to 4 ('strongly agree'). Cronbach's alpha was .92.

Habit Index of Negative Thinking (HINT) (Verplanken, Friborg, Wang, Trafimow, & Woolf, 2007)

The HINT is a 12-item measure of habitual negative thinking about the self. Responses were given on five-point scales, ranging from "strongly disagree" to "strongly agree", with scores across the 12-items totalled. Cronbach's alpha was .96.

Five-Facet Mindfulness Questionnaire (FFMQ) (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006)

This 39-item measure of mindfulness, developed based on a factor analytic study of five mindfulness questionnaires, is a reliable and valid scale (Baer et al., 2006). There are five factors: Observing (e.g., 'I pay attention to sensations, such as the wind in my hair or sun on my face'), Describing (e.g., 'I'm good at finding words to describe my feelings'), Acting with Awareness (e.g., 'I find it difficult to stay focused on what's happening in the present'), Non-Judging of Inner Experience (e.g., 'I tell myself I shouldn't be feeling the way I'm feeling') and Non-Reactivity to Inner Experience (e.g., 'I perceive my feelings and emotions without having to react to them'). Five response options range from 'Never or very rarely true' (1) to 'Very often or always true' (5). Cronbach's alphas in the present study ranged from .76 to .90.

Procedure

This was an online study requiring participants to complete a consent form before accessing questionnaires. Questionnaires were completed in the participants' own time. At the end of the questionnaires, participants received the researcher's contact details for questions or comments.

Statistical analysis

In order to establish components underlying the variables of interest, an exploratory principal components analysis was first utilised. An exploratory principal components analysis with all of the measures (BES, Rumination, HINT, SCS subscales, FFMQ subscales) was carried out using varimax rotation to identify underlying factors across these scales. Before conducting this analysis, Kaiser-

Meyer-Olkin (KMO) measure, Bartlett's test of sphericity and values in the correlation matrix and anti-image correlation matrix were examined to ascertain sampling adequacy (Dziuban & Shirkey, 1974; Kaiser & Rice, 1974).

Partial correlations between the IV, DV and mediators were then run in order to inform the mediation analyses. Analyses of mediation effects used a bootstrapped multivariate procedure as suggested by Preacher and Hayes (2008). Mediation was investigated by directly testing significance of the indirect effects of the independent variable (IV) on the dependent variable (DV) through mediator (M). This model also permits the inclusion of covariates. Within this approach, the results are based on 5000 bootstrapped samples and 95% confidence intervals were computed. The indirect effect is considered significant if the upper and lower bounds of the confidence intervals did not contain zero (Preacher & Hayes, 2008).

Results

Sample Characteristics

Mean scores across all measures are summarised in Table 1. There were no significant gender differences in psychological distress scores ($F(1, 379) = .110, p = .740$) or significant differences based on country ($F(2, 380) = .702, p = .496$). Psychological distress scores were significantly correlated with age ($r = -.120, p = .019$), therefore, age was controlled for as a covariate in all subsequent statistical analyses. Additionally, there were no significant differences based on relationship ($F(4, 380) = 1.420, p = .227$) or student / non-student status ($F(3, 378) = 1.055, p = .368$).

Factor Analysis

The correlation matrix indicated that there were significant correlations between the majority of variables, and that there were no correlation coefficients greater than 0.9 (Field, 2009). KMO was greater than 0.8, Bartlett's test was highly significant ($p < .001$), and the diagonals of the anti-image correlation matrix were all > 0.5 (Field, 2009), supporting the inclusion of each item in the factor analysis.

Examining eigenvalues > 1 and inspecting the scree plot suggested a three-factor solution. These three factors accounted for 62.26% of the variance and converged in five iterations. The factor loadings (> 0.4) for this solution are shown in Table 2.

Table 1. Means (with standard deviations) for all study variables.

	Mean	SD
Depression, Anxiety, Stress Scale	40.17	26.37
Frost Multidimensional Perfectionism Scale Unhealthy Perfectionism	61.43	16.73
Beliefs about Emotions Scale	39.91	14.49
Rumination Responses Questionnaire	32.72	9.97
Habitual Index of Negative Thoughts	38.62	14.12
Five-facet Mindfulness Questionnaire Observe	25.70	5.75
Five-facet Mindfulness Questionnaire Describe	25.98	7.14
Five-facet Mindfulness Questionnaire Act with awareness	24.50	6.50
Five-facet Mindfulness Questionnaire Non-judge	23.40	7.32
Five-facet Mindfulness Questionnaire Non-react	19.94	4.81
Self-Compassion Scale Self-Kindness	2.94	0.96
Self-Compassion Scale Self-Judgement	3.40	1.11
Self-Compassion Scale Common Humanity	2.94	0.95
Self-Compassion Scale Isolation	3.53	1.07
Self-Compassion Scale Mindfulness	3.40	0.96
Self-Compassion Scale Over-identified	3.59	1.11

Eight of the variables loaded onto factor one (see Table 2). These items reflect aspects of self-critical thinking, with the highest loading being on the over-identified subscale of the SCS; therefore this factor was labelled “self-criticism”. Four variables loaded onto a second factor related to self-compassion, self-kindness, more balanced thinking about the self, and a decentered perspective with the highest loading being on the common humanity subscale of the SCS. This factor was labelled “self-compassion”. Three variables loaded onto the third factor, representing awareness of ongoing experiences, describing experiences in words, and to a lesser extent, observing internal experiences without reacting. This factor was labelled “Present-moment awareness”. These three factors are independent of each other (i.e. they are not correlated). Composite scores were created for each of the three factors, utilising the regression method. Higher scores indicate higher levels of self-criticism, self-compassion, and present-moment awareness.

Table 2. *Factor Loadings for Three Factor Solution*

Measures	Factor Loading		
	1	2	3
<i>Self-Criticism</i>			
SCS Over-identified	0.811		
SCS Isolation	0.787		
FFMQ Non-judge	0.779		
HINT	-0.735		
SCS Self-Judgement	0.721		
BES	-0.717		
Rumination	-0.649		
FFMQ Act with Awareness	-0.623		
<i>Self-Compassion</i>			
SCS Common Humanity		0.811	
SCS Self Kindness		0.801	
SCS Mindfulness		0.747	
FFMQ Non-react		0.540	
<i>Present-moment Awareness</i>			
FFMQ Observe			0.785
FFMQ Describe			0.689
FFMQ Non-react			0.547

Correlational findings

Partial correlations (controlling for age) between psychological distress, unhealthy perfectionism, and the three previously identified factors (self-criticism, self-compassion, and present-moment awareness) are summarised in Table 3. Unhealthy perfectionism correlated significantly with psychological distress as expected. Self-criticism showed significant positive correlations, and self-compassion showed significant negative correlations, with both psychological distress and unhealthy perfectionism. Present-moment awareness did not significantly correlate with psychological distress or unhealthy perfectionism so this factor was excluded from subsequent analyses.

Table 3. Partial correlations (controlling for age) between psychological distress, unhealthy perfectionism, self-criticism, self-compassion, and mindful awareness.

Partial correlation coefficients	FMPS Unhealthy Perfectionism	DASS	Self-criticism	Self-compassion	Present-moment Awareness
FMPS					
Unhealthy Perfectionism	-				
DASS	0.56**	-			
Self-criticism	0.65**	0.65**	-		
Self-compassion	-0.16*	-0.17**	-.021	-	
Present-moment Awareness	-.090	-.054	.049	.023	-

**Correlation is significant at 0.01 level.

* Correlation is significant at 0.05 level.

Mediation analyses

Multiple mediator models, in which the identified factors 'self-criticism' and 'self-compassion' were entered simultaneously, allowed investigation of the indirect effects of the different constructs. Results are summarised in Figure 1 below.

In the meditation model, total effects indicated significant relations between unhealthy perfectionism and psychological distress. Both self-criticism and self-compassion significantly mediated the relationship between unhealthy perfectionism and psychological distress, as indicated by the confidence intervals for the indirect effects not including zero. Despite this significant mediation, the direct effects remained significant suggesting that the variables investigated partially mediated the relationship between unhealthy perfectionism and psychological distress.

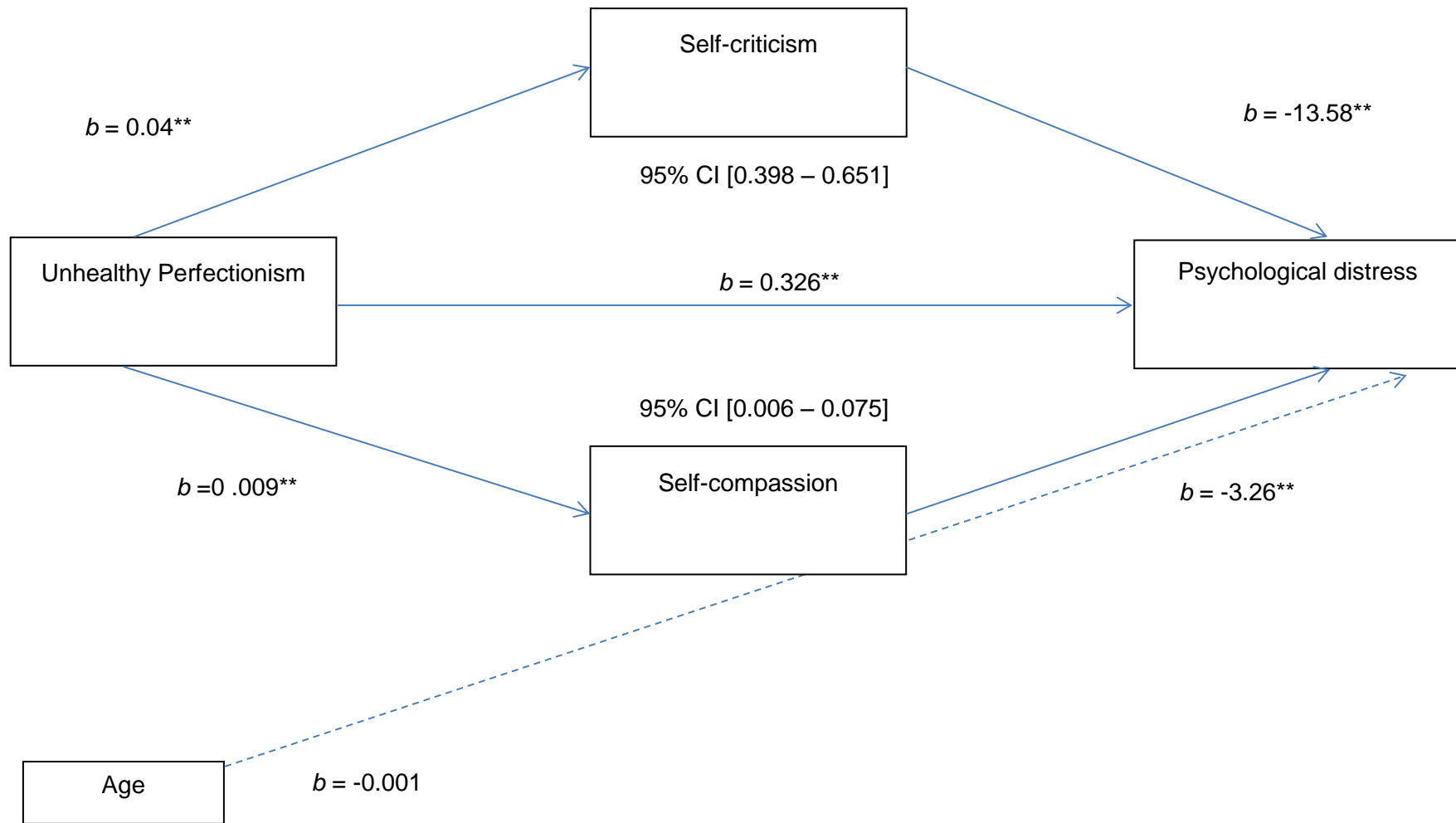


Figure 1. Indirect effects of self-criticism and self-compassion factors on the relationship between unhealthy perfectionism and psychological distress, while controlling for age. CI = Confidence Interval. $^{**}p < .01$

Discussion

The current study investigated potential mediating cognitive processes in the relationship between unhealthy perfectionism and psychological distress. By exploring rumination, self-criticism, perfectionist beliefs about emotions, mindfulness and self-compassion simultaneously within the same study, it was possible to investigate the relative contributions of roles of these overlapping constructs. Factor analysis identified three underlying, independent factors which were labelled self-criticism, self-compassion and present-moment awareness. Both self-criticism and self-compassion (but not present-moment awareness) were associated with psychological distress and unhealthy perfectionism, and were found to partially mediate this relationship.

The factor labelled 'self-criticism' was composed of measures of judgemental, self-critical, and ruminative cognitive responses to thoughts, emotions or other aspects of the self or one's experiences. The finding that this factor was a mediator between unhealthy perfectionism and distress is consistent with previous findings about self-criticism and rumination (e.g. Dunkley et al., 2006; Short & Mazmanian, 2013). By using a range of measures simultaneously, the study findings highlight that there may be one underlying construct of repetitive or habitual self-critical processing that is tapped into by measures of self-criticism, rumination and unhelpful beliefs about emotions, as well as some subscales of self-compassion and mindfulness questionnaires. Interventions which support perfectionist individuals to reduce repetitive, self-judgemental thinking may help to reduce psychological distress.

The second mediating factor between unhealthy perfectionism and distress was labelled as 'self-compassion'. Factor analysis had identified an underlying construct onto which loaded three subscales from the Self-Compassion Scale and the non-react items from the Five Facet Mindfulness Questionnaire. These items assess attempts to view imperfections as part of the normal human experience, self-kindness, taking a balanced view of upsetting reactions and observing emotional reactions without getting lost in them or reacting to them. These findings highlight that a self-compassionate way of thinking, which does not simply reflect positive thinking but incorporates the need to hold thoughts or experiences of failure in mind and still recognise that this is shared by others and requires understanding and kindness towards the self, may be particularly important in buffering against psychological distress as a result of unhealthy perfectionism. Theoretical models of perfectionism could be extended to incorporate self-compassion as a self-protective

process and cognitive behavioural interventions could include more focus on self-compassion. Cultivating self-compassion in those experiencing difficulties with unhealthy perfectionism may help responses to both success and failure, which often involve negative cognitive and affective reactions.

Another aspect of mindfulness, the present-moment observation of experience, was identified as a third underlying construct but was not significantly correlated with unhealthy perfectionism and distress. Both mindfulness and self-compassion have previously separately been investigated in relation to perfectionism but this is the first study to include both simultaneously. Mindfulness and self-compassion have both been conceptualised as multi-faceted constructs, with some researchers arguing that self-compassion is a sub-component of mindfulness (e.g. Baer, 2003) and others suggesting that mindfulness is a key component of self-compassion (Neff, 2003b). The present findings may indicate that if mindfulness interventions are used with perfectionist individuals, the self-compassion components may be more important than training people to improve their skills in bringing their attention to the present moment. These results are consistent with a pilot study comparing mindfulness-based cognitive therapy for unhealthy perfectionism with self-help, which found that self-compassion mediated the group differences in perfectionism after treatment (James & Rimes, in preparation).

Although these findings suggest that the factors of self-criticism and self-compassion are important mediators, it also needs to be considered that these constructs only partially mediated the relationship between unhealthy perfectionism and psychological distress. This suggests that other factors not assessed in the present study are likely to play a role in this relationship and therefore future research should continue to explore alternative processes.

Limitations

The current study was cross-sectional in nature; meaning that conclusions about the causal relationships between unhealthy perfectionism, self-criticism, self-compassion and psychological distress cannot be drawn. The study relied on self-report measurement, and included a sample of predominantly white, and college aged females, and the results may not be generalizable to other populations. Distress as measured by the Depression, Anxiety and Stress Scale was higher in this sample than a previous general population sample (Antony, Bieling, Cox, Enns,

& Swinson, 1998) and the findings require replication in both less distressed general population samples and also clinical and more culturally diverse populations.

Conclusions

In conclusion, this study suggests that the unhealthy perfectionism – distress relationship is mediated by higher levels of self-critical thinking and lower levels of self-compassion. This has implications for developing or refining interventions for people for whom perfectionism is causing difficulties.

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Appendix P – Main Research Project

University of Bath Ethics Approval

Dear Kirsty

Thanks for clearing that up and assuring me that you will not recruit or advertise the project in any way in an NHS establishment. Thanks also for attending to the other points raised by the committee.

I can now confirm that you have full ethical approval for your study.

Best wishes with your research.

Helen Lucey
Chair, Psychology Ethics Committee

Kirsty James wrote:
Dear Helen,

Thank you for your email. I have confirmed that the Student Health and Wellbeing service at Bath is not an NHS establishment, but the University Health Centre is. So we have removed this from our application and will not seek to advertise or recruit from this service.

Kind Regards,

Kirsty

Quoting Helen Lucey <H.Lucey@bath.ac.uk>:
Dear Kirsty

Thank you for email. With regard to your question about putting up a poster in the Health Centre, as far as I'm aware the NHS ethics rule still stands because a poster would count as recruitment of people on NHS premises that are patients of that service. So, we are back to the original question of whether the Health Centre is an NHS establishment or not.

Please let me know when you're clearer about that.

Best wishes
Helen

Kirsty James wrote:
Dear Helen,

Thank you for your email about our ethics application.

Please find attached our revised application where the points raised by the committee have been considered. With regards to recruitment from the University health centre, we have removed this from our application, but would like to ask whether it would be permissible for us to place an advert for the study here, but not ask the staff to refer to the trial. We have also provided more detail regarding those who are not suitable for the trial.

Many Thanks,

Kirsty James
Quoting Helen Lucey <H.Lucey@bath.ac.uk>:
Dear Kirsty James and Dr Kate Rimes

Reference Number 12-124

The ethics committee have considered your application for the study entitled 'A

pilot study of mindfulness training compared to psycho-education for perfectionism' and have given it conditional ethical approval.

The committee have raised the following points which they would like you to attend to before giving the study full ethical approval:

1. One of the places you intend to recruit participants from is the University health centre. Can you check that this is not an NHS service? If it is, you will need to seek NHS ethical approval.
2. Can you say more about how you would exclude people who do not meet your criteria for inclusion, but who want to take part?

Please send the revised document to me - you can do this by email.

Please remember that you may not collect any data until you have ethical approval.

Yours sincerely

Helen Lucey
Chair of Psychology Ethics Committee

Appendix Q – Main Research Project

Kings College London Ethics Approval

Date: 22/07/2013 10:12:40 GMT
From: Rimes, Katharine <katharine.rimes@kcl.ac.uk>
To: kcl - pnm <pnm@kcl.ac.uk>
Cc: Kirsty James (k.m.james@bath.ac.uk) <k.m.james@bath.ac.uk>
Subject: RE: Research Ethics Application Ref. PNM/12/13-154

Dear Rebecca

Re: Research Ethics Application Ref. PNM/12/13-154

Thank you for the letter about the above study. I am writing to confirm that I have made the further changes requested.

1. Sections 10d and 10e: 'Provide the full address where data will be stored during and after the study'. The application now includes the room number of the location where data will be stored.

2. Information Sheet and Consent Form:

I. 'Specify the date up to which participants may withdraw their data from the study' The exact date is now included. This date is now stated in section 7.2 of the Application Form.

II. The Research Ethics Application Reference Number (PNM/12/13-154) has been inserted at the top of each recruitment document.

Please find attached a revised document including both the application form and Information Sheet and Consent form.

Thank you for letting us know that the project has Ethical approval subject to the above amendments.

Best wishes
Kate

From: Cowper, Rebecca On Behalf Of kcl - pnm
Sent: 18 July 2013 15:15
To: Rimes, Katharine
Subject: Research Ethics Application Ref. PNM/12/13-154

Dear Katharine

Re: Research Ethics Application Ref. PNM/12/13-154

Thank you for submitting amendments to your research ethics application.

Please find attached your approval letter. Please be aware the approval is subject to provisos, outlined in the attached letter.
A signed hard copy of this letter will be sent to you in the post shortly.

If you have any questions regarding this application please contact the Research Ethics Office.

Kind regards

Rebecca

Rebecca Cowper, Research Support Assistant, Research Ethics Office, King's College London, Room 5.2 FWB (Waterloo Bridge Wing), Tel. 020 7848 3871
rebecca.cowper@kcl.ac.uk<mailto:rebecca.cowper@kcl.ac.uk>

Appendix R – Main Research Project

Recruitment Poster

ARE YOU A PERFECTIONIST?

Are your high standards or attention to detail causing problems?

Aiming high is often a good strategy.

But high standards can be problematic, for example if...

- You worry a lot about your performance
- You get very upset about negative feedback or low grades
 - You put off starting work (procrastinate)
- You spend longer than other people on your work
- You repeatedly check your work or ask for reassurance
- Another area of your life (e.g. socialising) is suffering

Overly high standards are not necessarily about work. They may concern your weight or appearance, social interactions, physical fitness, keeping things in order, and so on.

We are comparing two ways of helping people who are experiencing difficulties because of their perfectionism:

1) Written booklet with self-help exercises OR

2) Mindfulness meditation training

(Eight week course, [INSERT DATE/TIME] starting [INSERT DATE])

You could be eligible to take part in our study, if you:

- *feel that difficulties with your expectations or standards are causing you significant distress or affecting other areas of your life*
- *are an undergraduate or postgraduate*

FOR INFORMATION ABOUT THE STUDY (WITH NO OBLIGATION TO TAKE PART),

PLEASE CONTACT KIRSTY JAMES:

K.M.JAMES@BATH.AC.UK

Appendix S – Main Research Project

Trial Outcome Measures (151 – 162)

- Frost Multidimensional Perfectionism Scale (FMPS)
- Clinical Perfectionism Questionnaire (CPQ)
- Adapted Work and Social Adjustment Scale (WASAS)
- Depression, Anxiety and Stress Scale (DASS-21)
- Five-facet Mindfulness Questionnaire (FFMQ)
- Self-Compassion Scale (SCS)
- Beliefs about Emotions Scale (BES)
- Decentering Scale
- Rumination Responses Questionnaire (RRQ)
- Demographics Questionnaire

Frost Multidimensional Perfectionism Scale (FMPS)

Please circle the number that best corresponds to your agreement with each statement below.

	Strongly disagree				Strongly agree
1. My parents set very high standards for me.	1	2	3	4	5
2. Organisation is very important to me.	1	2	3	4	5
3. As a child, I was punished for doing things less than perfectly.	1	2	3	4	5
4. If I do not set the highest standards for myself, I am likely to end up a second-rate person.	1	2	3	4	5
5. My parents never tried to understand my mistakes.	1	2	3	4	5
6. It is important to me that I be thoroughly competent in everything I do.	1	2	3	4	5
7. I am a neat person.	1	2	3	4	5
8. I try to be an organised person.	1	2	3	4	5
9. If I fail at work / school, I am a failure as a person.	1	2	3	4	5
10. I should be upset if I make a mistake.	1	2	3	4	5
11. My parents wanted me to be the best at everything.	1	2	3	4	5
12. I set higher goals than most people.	1	2	3	4	5
13. If someone does a task at work / school better than I, then I feel like I failed the whole task.	1	2	3	4	5
14. If I fail partly, it is as bad as being a complete failure.	1	2	3	4	5
15. Only outstanding performance is good enough in my family.	1	2	3	4	5
16. I am very good at focusing my efforts on attaining a goal.	1	2	3	4	5
17. Even when I do something very carefully, I often feel that it is not quite right.	1	2	3	4	5
18. I hate being less than the best at things.	1	2	3	4	5
19. I have extremely high goals.	1	2	3	4	5
20. My parents have expected excellence from me.	1	2	3	4	5
21. People will probably think less of me if I make a mistake.	1	2	3	4	5

22. I never felt like I could meet my parents' expectations.	1	2	3	4	5
23. If I do not do as well as other people, it means I am an inferior human being.	1	2	3	4	5
24. Other people seem to accept lower standards from themselves than I do.	1	2	3	4	5
25. If I do not do well all the time, people will not respect me.	1	2	3	4	5
26. My parents have always had higher expectations for my future than I have.	1	2	3	4	5
27. I try to be a neat person.	1	2	3	4	5
28. I usually have doubts about the simple everyday things I do.	1	2	3	4	5
29. Neatness is very important to me.	1	2	3	4	5
30. I expect higher performance in my daily tasks than most people.	1	2	3	4	5
31. I am an organised person.	1	2	3	4	5
32. I tend to get behind in my work because I repeat things over and over.	1	2	3	4	5
33. It takes me a long time to do something 'right'.	1	2	3	4	5
34. The fewer mistakes I make, the more people will like me.	1	2	3	4	5
35. I never felt like I could meet my parents' standards.	1	2	3	4	5

Clinical Perfectionism Questionnaire (CPQ)

<p>Have you been trying to achieve high standards over the past month <u>whether or not you have succeeded</u>. Please circle YES or NO.</p> <p style="text-align: center;">YES / NO</p>					
<p>If so, in what areas of your life has this applied? - for example, it might have been in your performance at work, at sport, at music, at home, etc. Please note these below: </p>					
<p>Now, please place a 'X' in the column below which best describes you over the past month.</p>					
	Over the past month.....	Not at all	Some of the time	Most of the time	All of the time
1	Over the past month, have you pushed yourself really hard to meet your goals?				
2	Over the past month, have you tended to focus on what you <u>have</u> achieved, rather than on what you have not achieved?				
3	Over the past month, have you been told that your standards are too high?				
4	Over the past month, have you felt a failure as a person because you have not succeeded in meeting your goals?				
5	Over the past month, have you been afraid that you might not reach your standards?				
6	Over the past month, have you raised your standards because you thought they were too easy?				
7	Over the past month, have you judged yourself on the basis of your ability to achieve high standards?				
8	Over the past month, have you done just enough to get by?				
9	Over the past month, have you <u>repeatedly</u> checked how well you are doing at meeting your standards (for example, by comparing your performance with that of others)?				
10	Over the past month, do you think that other people would have thought of you as a "perfectionist"?				
11	Over the past month, have you kept trying to meet your standards, even if this has meant that you have missed out on things?				
12	Over the past month, have you avoided any tests of your performance (at meeting your goals) in case you failed?				

Adapted Work and Social Adjustment Scale (WASAS)

Perfectionism can affect people's ability to do certain day-to-day tasks in their lives. Please circle below to indicate how perfectionism impairs your ability to carry out the activity.

Because of my perfectionism my ability to <u>go to work</u> or <u>attend school/college</u> is impaired								
0	1	2	3	4	5	6	7	8
Not at All	Slightly		Definitely		Markedly		Very severely impaired / Cannot work	

Because of my perfectionism my <u>home management</u> is impaired (cleaning, shopping, cooking, child care, paying bills, etc)								
0	1	2	3	4	5	6	7	8
Not at All	Slightly		Definitely		Markedly		Very severely impaired	

Because of my perfectionism my <u>social & leisure</u> activities are impaired (activities with other people, e.g. outings, visitors, parties, etc)								
0	1	2	3	4	5	6	7	8
Not at All	Slightly		Definitely		Markedly		Very severely impaired	

Because of my perfectionism my <u>private</u> leisure activities are impaired (activities done alone, e.g. reading, gardening, walking alone, sewing, etc)								
0	1	2	3	4	5	6	7	8
Not at All	Slightly		Definitely		Markedly		Very severely impaired	

Because of my perfectionism my ability to form and maintain <u>relationships</u> is impaired								
0	1	2	3	4	5	6	7	8
Not at All	Slightly		Definitely		Markedly		Very severely impaired	

Depression, Anxiety and Stress Scale (DASS-21)

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the **past week***. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree, or some of the time
- 2 Applied to me to a considerable degree, or a good part of time
- 3 Applied to me very much, or most of the time

1	I found it hard to wind down	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I found it difficult to work up the initiative to do things	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I experienced trembling (e.g., in the hands)	0	1	2	3
8	I felt that I was using a lot of nervous energy	0	1	2	3
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting agitated	0	1	2	3
12	I found it difficult to relax	0	1	2	3
13	I felt down-hearted and blue	0	1	2	3
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15	I felt I was close to panic	0	1	2	3
16	I was unable to become enthusiastic about anything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life was meaningless	0	1	2	3

Five-facet Mindfulness Questionnaire (FFMQ)

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

- _____ 1. When I'm walking, I deliberately notice the sensations of my body moving.
- _____ 2. I'm good at finding words to describe my feelings.
- _____ 3. I criticize myself for having irrational or inappropriate emotions.
- _____ 4. I perceive my feelings and emotions without having to react to them.
- _____ 5. When I do things, my mind wanders off and I'm easily distracted.
- _____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
- _____ 7. I can easily put my beliefs, opinions, and expectations into words.
- _____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or _____ distracted.
- _____ 9. I watch my feelings without getting lost in them.
- _____ 10. I tell myself I shouldn't be feeling the way I'm feeling.
- _____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
- _____ 12. It's hard for me to find the words to describe what I'm thinking.
- _____ 13. I am easily distracted.
- _____ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
- _____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- _____ 16. I have trouble thinking of the right words to express how I feel about things
- _____ 17. I make judgments about whether my thoughts are good or bad.
- _____ 18. I find it difficult to stay focused on what's happening in the present.
- _____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- _____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.

1	2	3	4	5
never or very rarely true	Rarely True	sometimes true	often true	very often or always true

- _____ 21. In difficult situations, I can pause without immediately reacting.
- _____ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words
- _____ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
- _____ 24. When I have distressing thoughts or images, I feel calm soon after.
- _____ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
- _____ 26. I notice the smells and aromas of things.
- _____ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
- _____ 28. I rush through activities without being really attentive to them.
- _____ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
- _____ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
- _____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- _____ 32. My natural tendency is to put my experiences into words.
- _____ 33. When I have distressing thoughts or images, I just notice them and let them go.
- _____ 34. I do jobs or tasks automatically without being aware of what I'm doing.
- _____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- _____ 36. I pay attention to how my emotions affect my thoughts and behavior.
- _____ 37. I can usually describe how I feel at the moment in considerable detail.
- _____ 38. I find myself doing things without paying attention.
- _____ 39. I disapprove of myself when I have irrational ideas.

Self-Compassion Scale (SCS)

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you feel or behave in the stated manner, using the following scale:

**Almost
never**

1

2

3

4

**Almost
always**

5

_____ 1. When I fail at something important to me I become consumed by feelings of inadequacy.

_____ 2. I try to be understanding and patient towards those aspects of my personality I don't like.

_____ 3. When something painful happens I try to take a balanced view of the situation.

_____ 4. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

_____ 5. I try to see my failings as part of the human condition.

_____ 6. When I'm going through a very hard time, I give myself the caring and tenderness I need.

_____ 7. When something upsets me I try to keep my emotions in balance.

_____ 8. When I fail at something that's important to me, I tend to feel alone in my failure.

_____ 9. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

_____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

_____ 11. I'm disapproving and judgmental about my own flaws and inadequacies.

_____ 12. I'm intolerant and impatient towards those aspects of my personality I don't like.

Beliefs about Emotions Scale (BES)

Please tick the column that best describes how you think. Please note that because people are different, there are no right or wrong answers to these statements. To decide whether a given answer is typical of your way of looking at things, simply keep in mind how you think most of the time.

	Totally agree	Agree very much	Agree slightly	Neutral	Disagree slightly	Disagree very much	Totally disagree
It is a sign of weakness if I have miserable thoughts.							
If I have difficulties I should not admit them to others.							
If I lose control of my emotions in front of others, they will think less of me.							
I should be able to control my emotions.							
If I am having difficulties it is important to put on a brave face.							
If I show signs of weakness then others will reject me.							
I should not let myself give in to negative feelings.							
I should be able to cope with difficulties on my own without turning to others for support.							
To be acceptable to others, I must keep any difficulties or negative feelings to myself.							
It is stupid to have miserable thoughts.							
It would be a sign of weakness to show my emotions in public.							
Others expect me to always be in control of my emotions.							

Decentering Scale

Instructions: We are interested in your recent experiences. Below is a list of things that people sometimes experience. Next to each item are five choices: “never”, “rarely”, “sometimes”, “often”, and “all the time”. Please mark one of these to indicate how much you currently have experiences similar to those described.

Please do not spend too long on each item—it is your first response that we are interested in. Please be sure to answer every item.

		Never	Rarely	Sometimes	Often	All the time
1	I am better able to accept myself as I am					
2	I can slow my thinking at times of stress.					
3	I notice that I don't take difficulties so personally					
4	I can separate myself from my thoughts and feelings.					
5	I can take time to respond to difficulties					
6	I can treat myself kindly					
7	I can observe unpleasant feelings without being drawn into them.					
8	I have the sense that I am fully aware of what is going on around me and inside me.					
9	I can actually see that I am not my thoughts					
10	I am consciously aware of a sense of my body as a whole					
11	I view things from a wider perspective					

Rumination Responses Questionnaire (RRQ)

For each of the following statements, please indicate your level of agreement or disagreement by using the scale below.

Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
0	1	2	3	4

1. I tend to “ruminate” or dwell over things that happen to me for a really long time afterward _____
2. Often I’m playing back over in my mind how I acted in a past situation _____
3. I always seem to be rehashing in my mind recent things I’ve said or done _____
4. Long after an argument or disagreement is over with, my thoughts keep going back to what happened _____
5. I don’t waste time rethinking things that are over and done with _____
6. I often find myself re-evaluating something I’ve done _____
7. I often reflect on episodes in my life that I should no longer concern myself with _____
8. I spend a great deal of time thinking back over my embarrassing or disappointing moments _____
9. I never ruminate or dwell on myself for very long _____
10. It is easy for me to put unwanted thoughts out of my mind _____
11. Sometimes it is hard for me to shut off thoughts about myself _____
12. My attention is often focused on aspects of myself I wish I’d stop thinking about _____

Demographic Questions

1. Are you currently having any other help for your perfectionism? Yes / No

Please specify: _____

2. Are you taking any medication for psychological problem (e.g. depression, anxiety) Yes / No

If yes please specify _____

- 3.

<i>Are you:</i>	Single	Partner, living apart	Married / living together	Divorced/ separated	Widowed
Please tick					

- 4.

<i>Highest educational qualification already completed:</i>	GCSEs or O levels or equivalent	A levels or vocational Qualification or equivalent	University degree

5. Which of these best describes your current work status?

Full time work	Part time work	Student	Unemployed	Temporary Sick
Permane nt sick / disabled	Retired	Looking after children	Being a carer	Looking after the home

7. How many hours a week do you spend studying (outside of lectures, classes etc)
_____ hrs per week

8. For how many hours do you undertake paid work, per week? _____ hours

9. If you currently do voluntary work, please indicate how many hours per week:
_____ hours

10. **Ethnic Origin (Please circle the code for the group that you think is most appropriate for you)**

WHITE	CODE
British	A
Irish	B
Any other White background	C
MIXED	
White and Black Caribbean	D
White and Black African	E
White and Asian	F

Any other mixed background	G
ASIAN OR ASIAN BRITISH	
Indian	H
Pakistani	J
Bangladeshi	K
Any other Asian background	L
BLACK OR BLACK BRITISH	CODE
Caribbean	M
African	N
Any other Black background	P
OTHER ETHNIC GROUPS	
Chinese	R
Any other ethnic group	S

Have you ever meditated before?

Yes / No

Have you ever done mindfulness meditation before?

Yes / No

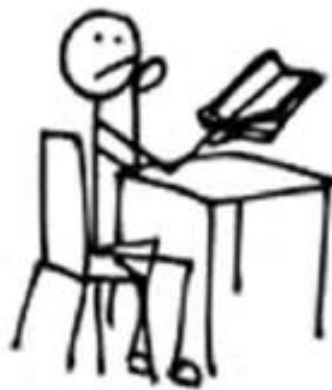
Do you ever meditate now, even occasionally?

Yes / No

If so, please specify approximately how much and how often:.....

Appendix T – Main Research Project
Self-help psycho-educational booklet

**MANAGING PERFECTIONISM:
A SELF-HELP GUIDE**



Kirsty James & Katharine Rimes

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WHAT IS PERFECTIONISM?

Perfectionism is not necessarily about being 'perfect'. For perfectionists, feeling good about oneself often depends on working towards and achieving extremely high standards, but "perfection" is not necessarily the goal. There are different sides to perfectionism. It can be unhelpful if it is associated with feeling under lots of pressure to meet high standards and experiencing worry, fear, anger, or low mood when we think we might not be able to.

Healthy perfectionism Having high standards for ourselves, working very hard to meet these standards, and reviewing mistakes to avoid them in the future can be helpful. When it is associated with feeling challenged in a good way, and helps us to achieve things in life, this is sometimes known as 'healthy perfectionism'. A healthy pursuit of excellence can be an integral part of high achievement. However, whilst having high standards and goals may help us to achieve things in life, sometimes these standards get in the way of our happiness and can actually impair our performance.

Unhealthy perfectionism: The paradox Most people think of perfectionism as a positive thing. However, as described above, having goals that are either unachievable or only achievable at great cost and with negative consequences can be unhelpful and make it more difficult to feel good about ourselves. This is sometimes known as 'unhealthy perfectionism' and it is this side of perfectionism we focus on here. The continued pressure we can feel to meet these high standards, and our fears about possibly not meeting them, can lead us to experience frustration, worry, social isolation, and low mood and makes it very difficult to feel good about ourselves. Paradoxically, all of these things can then prevent us doing as well as we would have liked to.

When am I a perfectionist? Perfectionism and extremely high standards can affect many different areas of our lives or be focused on one or two particular areas. Here are some areas in which perfectionism could develop:

- Work / Study
- Housework / Cleaning / Tidiness
- Close relationships (e.g. partner, family, friends)
- Eating / weight / shape
- Appearance / Grooming / personal hygiene
- Sport / Health & Fitness

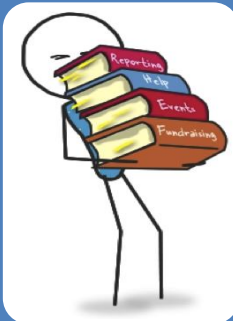
How am I a perfectionist? Perfectionism can affect the way we **think**, **act**, and **feel**. See below for common examples of each:

Think



- "I can't do anything right"
- "I should do well at everything I do"
- "I've done something wrong when people criticise me"
- "I shouldn't make mistakes"
- "I should do one thing at a time"
- "All the details should be just right"
- "If I can't do it right, what's the point?"
- "I'm stupid"

Act



- Spend a long time trying to reach high standards
- Try to do too many things at once
- Find it difficult to let others help
- Struggle to make decisions
- Compare self to others
- Do things at the last minute (procrastinate)
- Always keep busy
- Seek reassurance from others
- Repeatedly check for mistakes
- Stop doing social activities

Feel



- Anxious about not getting things right
- Worried about the details
- Embarrassed about mistakes
- Exhausted and unable to relax
- Guilty if spending time having fun or not achieving anything useful
- Annoyed if things aren't done the right way
- Afraid of being left out
- Upset if criticised by others

To illustrate how perfectionism can affect these three areas, the examples below describe two people experiencing difficulties with perfectionism.

Sarah is an undergraduate student completing a degree in Business. She has always worked hard on her studies, and completed her A-Levels achieving top marks across her subjects. Sarah was excited to start her degree and wanted to continue doing the best that she could. When set coursework, Sarah thinks “I need to get this essay ‘just right’ in order to do well” and begins to worry and feel anxious when thinking that this might not happen. As a result, Sarah works long hours on her essays and will regularly check her work for mistakes. Despite being popular on her course, she finds it difficult to take time out of studying to meet up with friends, and can find it difficult to sleep when deadlines are approaching.



David plays on his local football team. The team play well, and have recently won a couple of big tournaments. As the team have become more successful, they have begun to take training more seriously. After both training and matches, David finds that he worries about his performance, despite being told by others that he is doing well. He worries about, for example, whether he made the right pass and set-up or scored enough goals. David now feels less motivated and struggles to go to the team’s training and matches, often making excuses for not attending and avoiding phone calls from the manager and other players.



In order to understand how perfectionism affects him, David had a go at breaking down his difficulties into the following areas:

Think

- *"I'm not good enough to play on the team"*
- *"I won't set-up or score enough goals"*

Act

- *Seek reassurance from other team members*
- *Find it more difficult to go to training – keep making excuses not to*
- *Avoid calls from manager and players*

Feel

- *Worried about letting the team and myself down*
- *Bad about myself if I don't play well enough*
- *Guilty for not going to training*



An important first step is to become aware of how perfectionism affects how you **think**, **act** and **feel**. You may want to use the above lists to help start your thinking processes but there are likely to be other examples too. Note down your thoughts on the following questions either in the space below or in a separate notebook.

Perfectionism affects how I **think** in the following ways:

Perfectionism affects how I **act** in the following ways:

Perfectionism affects how I **feel** in the following ways:

WHY DO PERFECTIONISTS ACT, THINK, AND FEEL THIS WAY?

There is no simple answer to this question as everyone's different. Some theories suggest that it depends on what we believe about ourselves and the world around us, which starts to develop very early in life.

How Perfectionism Begins It is likely that there are some genetic influences over our tendency to develop perfectionist characteristics but these are only one factor. Genetic factors probably interact with our life experiences to result in perfectionism. For example our experiences with people who are important in our life (e.g. our parents, grand-parents, other family members, teachers, and/or friends) can influence the way we view ourselves. These people generally want the best for us and will try to protect us from getting hurt. Sometimes, though, they can send messages they don't mean to. For example, parents who try hard to protect their children from getting hurt and making errors may accidentally send the message that mistakes are not acceptable. If children get the message that they need to be perfect in order to be acceptable, then it is likely that they will try to do just that.

Young people might begin to think that they need to be perfect if the important people in their lives:

- **Are perfectionists themselves.** We might learn to be a perfectionist by observing how others around us behave and acting like this too.
- **Praise them for doing well.** Sometimes, when we set high standards for ourselves and others praise us for doing well, we learn that this can make us feel good. This can make us believe that in order to feel good, we need to be perfect.
- **Don't say much at all about what they do.** Sometimes when those important people don't comment on what we do, it can feel like they don't care or we aren't important. We might then try to be perfect to be noticed and feel more important.
- **Criticise them a lot.** If we often feel negatively judged by others, we might work hard to please them. Being perfect may begin to seem like the only way to do this.
- **Criticise others a lot.** Sometimes, people in our life can criticise others a lot. This can make us not want to be like those they criticise, so we try hard to be perfect to prevent criticism.

- **Compare individuals with each other.** If people often say things like ‘Why can’t you be more like X’ you might start to feel like you aren’t good enough. You might then try to be perfect so that you feel more confident.
- **Do lots of things for them.** Sometimes, people want things done quicker and better than we can, and as a result, might not let other people do things for themselves. This can lead us to think that we can’t do these things very well, and we might work hard to be perfect to feel like we can.
- **Say “Yes, but” to them a lot.** If those people who are important to us often say “Yes that’s good, but...” we might start to think that what we do is not good enough and we have to be perfect.
- **Hold very strict rules about how they should behave.** If we knew others when we were growing up, or currently know people who hold strict rules about how we should behave, it can make it hard to relax and enjoy ourselves. In these situations, we might try to be perfect so that we can avoid confrontation with others and not get in trouble for doing things incorrectly.
- **Live in environments that they don’t feel safe or calm in.** In some relationships there can be lots of fighting or arguing. There might even be violence. Sometimes when we’re in this type of environment we try to be perfect because we think it can make these bad things better.

It’s not about Blame It’s really important not to blame yourself or those around you for your perfectionism. Most people probably did not mean to contribute to your perfectionism – they did things to try to help and protect you. Blaming yourself or others doesn’t help overcome your perfectionism. But sometimes it can be helpful to try to understand your perfectionism so you can make things better.



Note down some thoughts in the space below (or in a separate booklet) about what kinds of influences you think there have been on the development of your perfectionism?

Perhaps you don't recognise these types of experiences? Don't worry if not, the skills presented in the following sections are designed to help, no matter how your perfectionism developed.

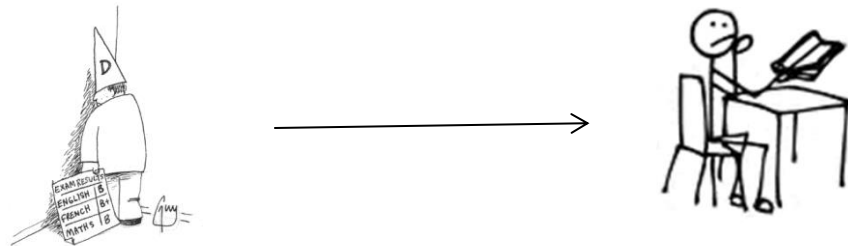
WHAT KEEPS PERFECTIONISM GOING?

Rules for Living Due to the different experiences we have throughout our life, we develop rules to help us make sense of the world and navigate through it efficiently. These rules help by enabling us to process incoming information more quickly. However, whilst many of these rules are helpful for us, some can be unhelpful. A rule tends to be unhelpful if it is:

- **Inaccurate** (is it true this rule must be met to achieve the results) **or**
- **Unreasonable** (does the rule specify reasonable expectations within a well-balanced life?) **or**
- **Inflexible** (am I able to adjust my rules when necessary?)

For example, the rule 'I must never make mistakes' is unhelpful because it is not possible or reasonable that we would be able to maintain this standard. This unhelpful rule means you are likely to feel bad when making a mistake and also makes it difficult for you to feel good about yourself, unless it has been met.

Perfectionist Rules for Living Perfectionism involves particular rules related to our performance and achievements. These rules may be in the background and not affect us all the time, but instead get “activated” in particular circumstances, such as situations where failure may be possible or we are going to be evaluated. At one time the perfectionist rules may have been useful. For example, a child may have attended a very strict and competitive school where anything less than perfect performance resulted in being criticised or even humiliated in front of the class. In this situation it is understandable that the child learnt “I must achieve things perfectly otherwise people will be critical and I will feel ashamed”. Trying hard not to make mistakes helped the child avoid being told off in front of their friends and meant that teachers were nicer to them. However, that rule might then linger at the back of their mind for years afterwards even in much less harsh environments, and he might continue to keep acting as though it is true, especially when activated in certain situations. Once activated, these rules will guide the way that we think and behave.





Remember Sarah?

Sarah's perfectionist rule for living is "If I do not achieve consistently high marks in my work that means I have failed and others will think less of me". When situations, such as coursework and exams arise, Sarah feels anxious at the thought of not doing her very best. As a result, Sarah spends lots of time on her university work, finds it difficult to take time out to see her friends, and has difficulties sleeping when deadlines are approaching.

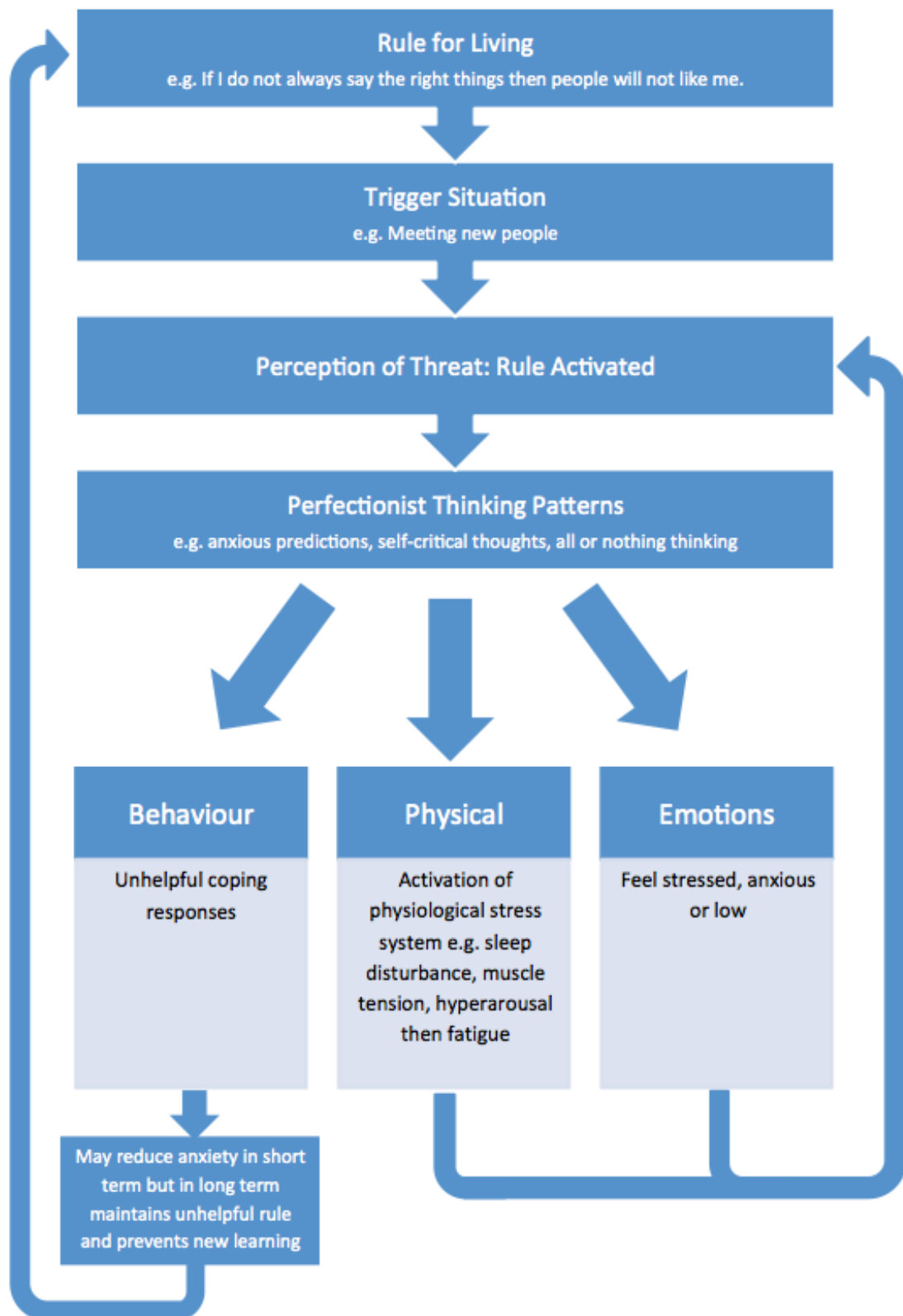
Other common unhelpful perfectionist rules for living include:

- "If I make mistakes, then people will think badly of me"
- "If I don't do things in a certain way, everything will get out of control and I won't be able to cope"
- "If I don't always perform to the best of my ability, I have let down myself and other people"
- "If I'm not prepared for all outcomes, then I won't cope when things go wrong"

Trigger Situations The trigger situations that activate unhelpful perfectionist rules vary from person to person, depending on the specific rule. Many perfectionists find trigger situations are those where they fear that they may be unable to meet their high standards, or where they may be criticised. These situations can be obvious larger events such as exams, but also include things that occur on a day-to-day basis. For example, if you have perfectionist rules about your appearance, these may get triggered every day when you meet people who you think may be judging how you are looking. As described above, Sarah's trigger situations are coursework and exam deadlines.

When unhelpful perfectionistic rules are activated, this can set off a vicious cycle of patterns of thinking, feeling and behaving. This cycle is illustrated in Figure 1.

THE VICIOUS CYCLE OF PERFECTIONISM (FIGURE 1)



The Response to Threat: Perfectionist Thinking As rules for living prioritise processing speed, not accuracy, once a perfectionist rule has been activated, it leads to systematic **biases** in our thinking. These thinking biases mean that we attend to threatening information that we might need to act on, and tend to disregard information about safety or success. These biases also mean that we are less likely to notice information that does not fit with our rule, or we discount it. Our thinking can get more extreme or rigid, with an “all-or-nothing” quality. We can start to view things in black or white terms such as ‘success / failure’, “good / bad” rather than in shades of grey and the middle ground.

The Impact of Perfectionist Thinking on Behaviour Perfectionist thinking can affect your behaviour by leading to unhelpful coping responses to ensure you continue to meet your perfectionist rules. These unhelpful behaviours might include one or more of the following:

- Struggling to make choices
- Excessively organising and list making
- Waiting to do things until the last minute (procrastinate)
- Always comparing your work to the work of others
- Rarely letting others help
- Always having to win
- Keeping constantly busy
- Always having to be in control
- Getting carried away with the details
- Never being satisfied with your work
- Giving up easily or avoiding situations in which you might fail
- Seeking reassurance (e.g. asking others to check your work to ensure its acceptable)

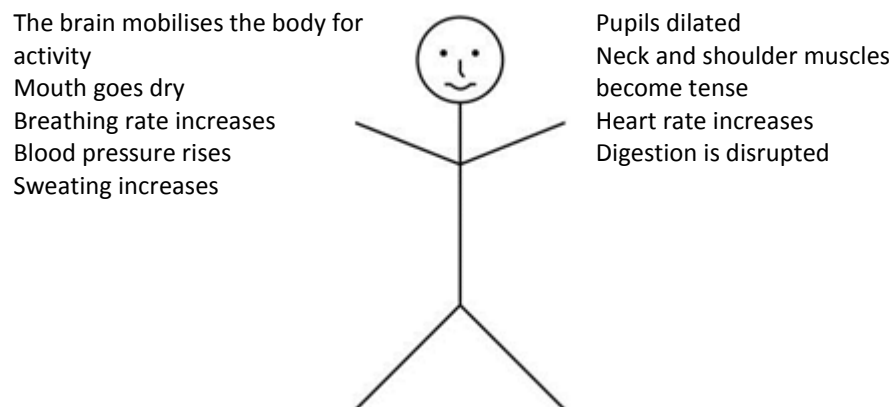


These unhelpful coping responses can reduce stress or anxiety in the short term. However, in the long term they can prevent you from learning that your rule may actually be unhelpful. Instead, they act to keep the rule going. They can also prevent you learning that these coping responses are usually not necessary.

The Impact of Perfectionist Thinking on Emotions Perfectionist rules often specify threatening outcomes if high standards are not maintained. Once the rule and perfectionist thinking has been activated, there is often a sense of fear, or feeling of stress or anxiety. This may be a subtle feeling at the back of your mind or may be quite overwhelming at times.

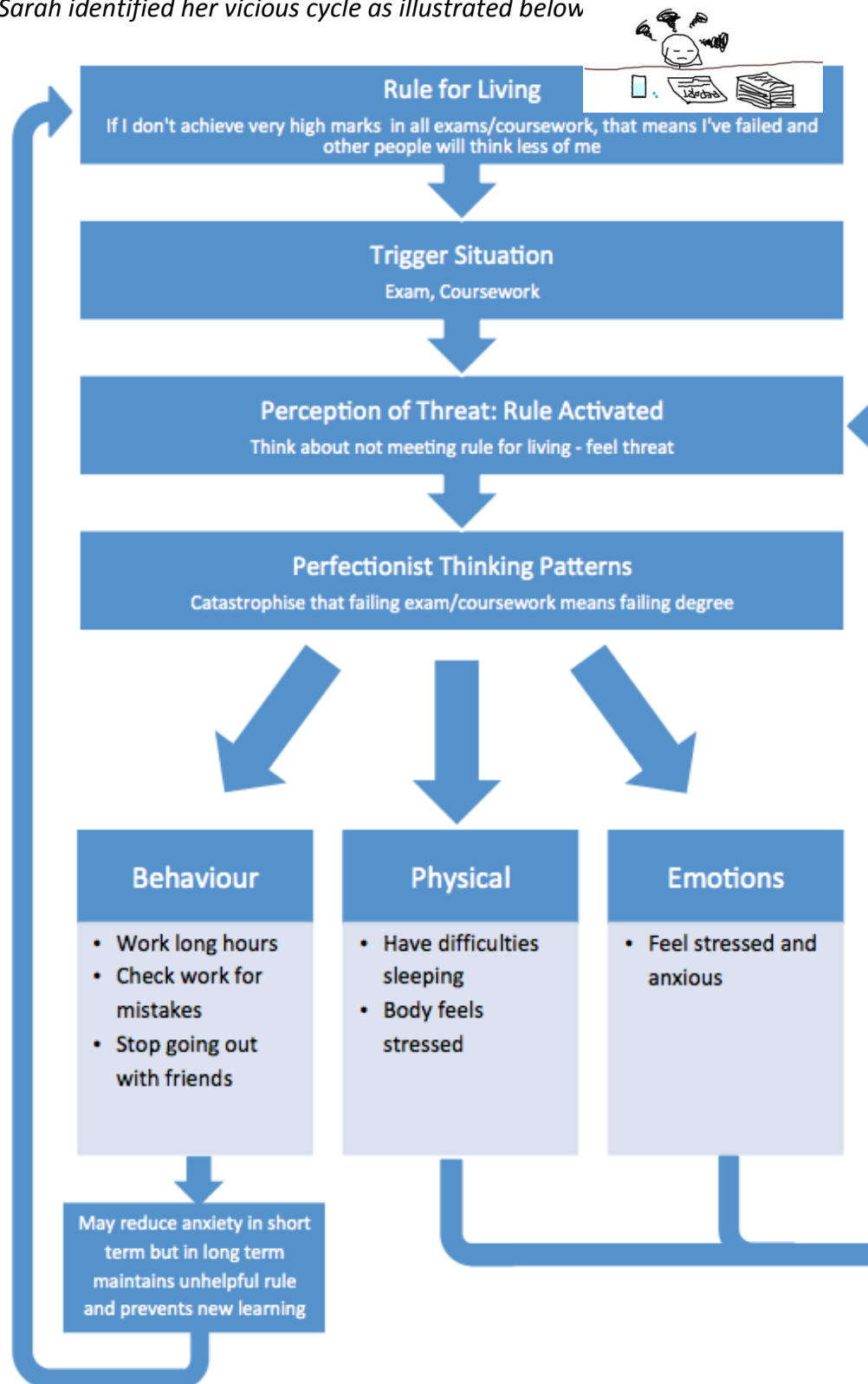
When perfectionist rules are activated, they are also associated with an increase in self-critical thoughts. This can make you feel worse about yourself and could also make you feel quite low or depressed.

The Impact of Perfectionist Thinking on Physical State Similarly, perfectionist thinking can lead to changes in our body. When we feel fear or anxiety, we may experience changes in our heart rate, our breathing, how tense our muscles feel, and we can notice sweating, shakiness and strange sensations in our stomach. At these times of high stress, increased levels of a hormone called Cortisol are released into the bloodstream. This hormone has some short-term positive effects, such as an energy boost and increased alertness, but longer-term can be harmful, causing concentration or decision-making difficulties, higher blood pressure and lower immunity to illness. Experiencing these bodily changes can add to the stress of the situation and keep unhelpful perfectionist rules activated.

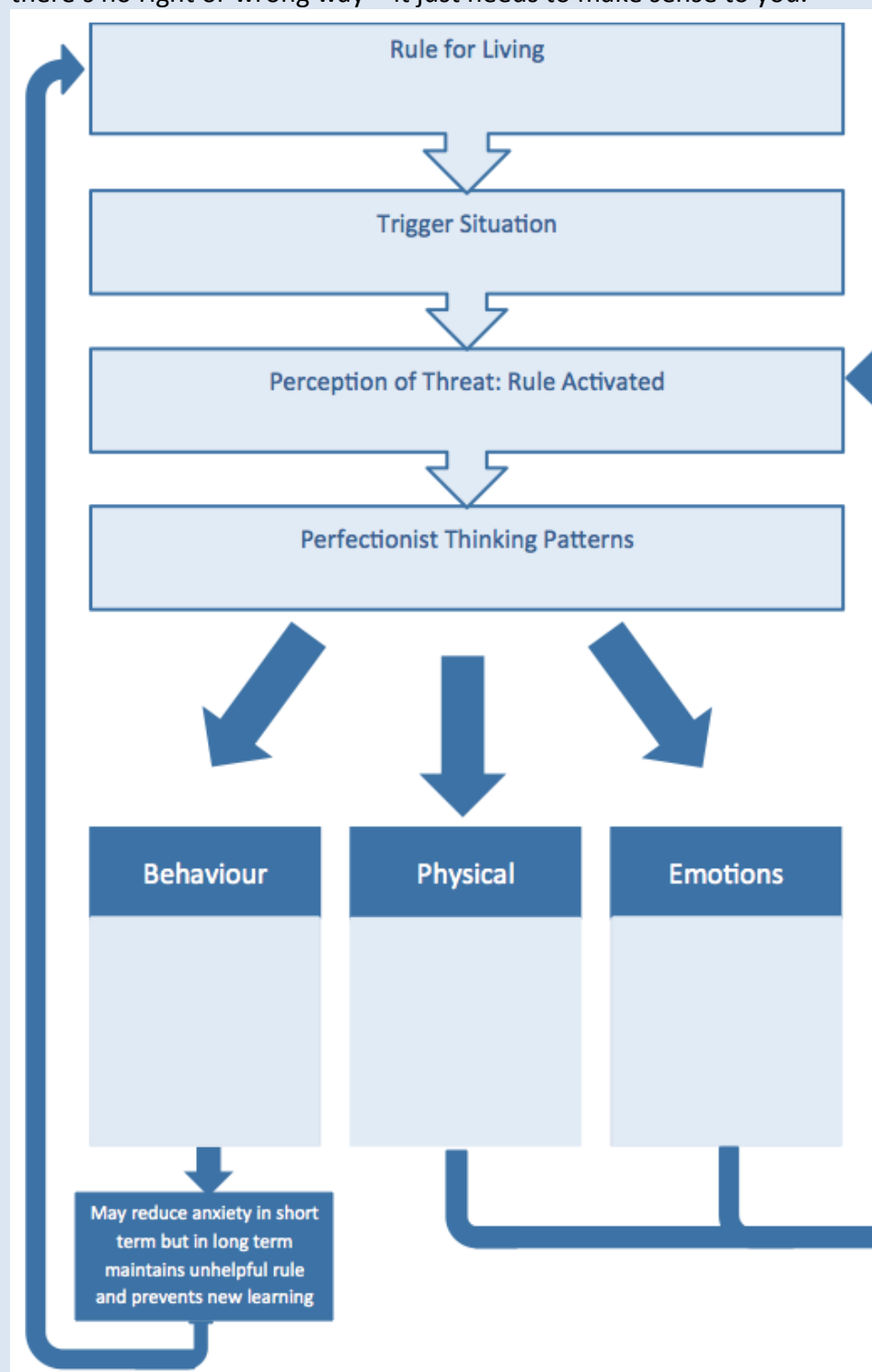


So, in summary, this model suggests that, when unhelpful perfectionist rules are activated, the resulting changes in the way we **think**, **act** and **feel** can set up a vicious cycle that keeps these rules in place and maintains your perfectionism.

Sarah identified her vicious cycle as illustrated below



Try to identify your vicious cycle below (or in a separate booklet) . Try to use the explanation above and Sarah's example to guide you. It's not easy to do this, so don't worry if you find it difficult. But remember there's no right or wrong way – it just needs to make sense to you.



Once you have had a go at drawing your vicious cycle – ask yourself whether it makes sense to you and how it feels seeing it written down. Is there anything you can learn from this?

PRO'S AND CON'S OF PERFECTIONISM

As we have described, perfectionism can be useful and help us achieve things in life, but it can also have negative consequences and make it difficult for us to feel good about ourselves. It's important to weigh up the pros and cons of your perfectionism and changing this so that you can decide whether you find its consequences helpful or unhelpful in your everyday life. Most aspects of perfectionism have advantages and disadvantages. When thinking about changing this, there can also be advantages and disadvantages.

An example of this exercise that Sarah's completed is provided below.



Pros of perfectionism:

- * Feel reassured that I have found mistakes
- * It feels less likely that I will fail, and I haven't failed in the past as a result
- * When I achieve high standards, I feel good temporarily

Cons of perfectionism:

- * Time Consuming - I don't have time for other work or activities
- * Find myself worrying about mistakes all the time
- * Go to bed late due to checking, and have trouble sleeping

Pros of changing perfectionism:

- * More time to spend going out with friends
- * Be able to go to bed earlier and sleep for longer
- * Although it might be hard to change, I would probably get used to it & feel better in long-run

Cons of changing perfectionism:

- * Might initially feel worried that I have made mistakes and will fail
- * May feel more stressed in short-term (e.g. if I hand in work without checking it several times)



First, have a go at identifying the advantages and disadvantages of your own perfectionism in the top table. Next, have a think about the advantages and disadvantages of changing your perfectionism in the second table below:



Pros of perfectionism:

Cons of perfectionism:



Pros of changing perfectionism:

Cons of changing perfectionism:

What did you learn from doing this exercise? How ready for change do you think you are?

PERFECTIONIST THINKING

As previously discussed, rules for living can lead to systematic **biases** in our thinking. In evolutionary terms, these thinking biases can help to keep us safe. The types of rules associated with perfectionism are often to do with some kind of threat, e.g. to our self-esteem or how others view us. In threatening situations, there is a human tendency to err on the side of caution, which helps to keep us safe. It means that we attend to threatening information that we might need to act on urgently, and tend to disregard information about safety or success. Unfortunately, as well as sometimes keeping us safe, it can also mean that we sometimes perceive situations as more threatening than they really are. These biases also mean that we are less likely to notice information that does not fit with our rule, or we discount it.

These thinking biases help to explain how unhelpful rules can keep going despite evidence that does not fit with them. Below are some examples of common thinking biases, and further information about all or nothing thinking which is particularly common in perfectionists:

Thinking Bias	Example of thought showing the bias
All or Nothing Thinking	"If I don't get high marks then I don't deserve to be doing this degree"
Mental Filter	Bias towards noticing negative or threatening & not positive information
Shoulds and Musts	"I should never make mistakes"; "I must always be in control"
Catastrophising	"If I don't pass this exam, I'll fail my degree"
Labelling	"I'm stupid and useless"
Jumping to Conclusions	"He yawned when I did my presentation, it must have been boring"
Magnification	"That mistake in my essay was a disaster, it's totally embarrassing"
Minimisation	"Lots of people got a good mark, it must have been an easy exam"
Anxious Predictions	"I am not going to give a good enough presentation, the audience will be bored and disappointed"

All or Nothing Thinking This thinking bias is particularly common in people experiencing difficulties with perfectionism. This bias happens when we judge things in extremes – such as being 'good' or 'bad' or as a 'complete success' or 'complete failure'. The difficulty with thinking about things in these extremes is that

it does not leave you with a middle ground or allow you to judge things as 'good enough' or 'average'.

Using Continuums One way to look at whether your all or nothing thinking is causing you difficulties is to use a continuum. This is simply a continuous line going between two extremes. Continuums can help you to compare where you think you are on two opposite extremes. This can highlight the middle ground that this thinking bias hides.

Here are the steps for using continuums:

1. Identify your "all or nothing" thought
2. Note down the two extreme ends of your thought and put them either side of the continuum
3. Think of recent specific examples that are not at the extremes and place these along the continuum
4. Reflect on what you can learn about your all or nothing thought from the continuum



Here is an example of one of Sarah's continuums:

All or Nothing Thought: My performance has to be perfect otherwise I've failed

Continuum:

Failed _____ Perfect

Recent specific examples:

I passed my recent essay achieving 65%

Failed _____ X _____ Perfect

I passed a seminar presentation with my tutor group even though I was very anxious and spoke too quickly and forgot one of the main points

Failed _____ X _____ Perfect

I passed my driving test even though I made a couple of minor errors

Failed _____ X _____ Perfect

Reflection: I have passed lots of things without the work being perfect.



All or Nothing Thinking

In the space below (or in a separate booklet) try answering the following questions about your all or nothing thinking:

All Or Nothing Thought:

Continuum:

Recent specific examples:

Reflection:

DEALING WITH PERFECTIONIST THINKING

Thought Diaries Thought diaries can help you become aware of your thoughts and notice whether they might be biased. They can also help you see how your thoughts affect how you feel and behave. Then you can try to find out more balanced alternative thoughts.

Here are the steps for completing a thought diary:





1. Note down the situation
2. Identify your emotions at the time, and rate them on a scale of 0-100
3. Think about any physical sensations in your body at the time
4. Ask yourself 'What went through my mind at the time?' to identify your thoughts. Rate how strongly you believe these on a scale of 0-100.
5. Identify any biased thinking patterns that may be in operation
6. Choose one thought that you want to work with (underline on form)
7. Note down the evidence for and against this thought. Think about different ways of viewing the situation and what others would say.
8. Develop an alternative, more flexible thought after considering all the evidence for and against the thought you identified
9. Re-rate the strength of both the emotion and the thoughts you originally identified.



See the next page for one of David's thought diaries.

Top Tips for using thought diaries:

- **Don't rush it:** It can be difficult at first to come up with alternative thoughts, or when you do, they don't feel believable. Biased thinking patterns take time to challenge, and the skills to do this take time to develop.
- **Be gentle with yourself:** If you feel upset after a situation, you might find it difficult to evaluate evidence for and against your thoughts. Remember to be kind to yourself at these times as, even though your reaction is understandable, it can be hard not to criticise yourself. Note down the details of the situation, but come back to completing the thought diary when you feel up to it.
- **It takes time so try not to be hard on yourself:** Challenging your thoughts is not easy, and as with any skill, this takes time and practice and will not change immediately.

Situation	Emotions & Body Sensations	Thoughts	Biased Thinking Patterns	Evidence for & against thought	Alternative thought – re-rate emotion
<p>My football manager left a message on my phone asking me to call him</p> 	<p>Worried 85% Anxious 80% Guilty 70% My chest is tight, and I can feel my heart pounding.</p> 	<p><u>I won't be good enough to play</u> If I play, then I'll let the team down & be criticised by other team members I'm useless</p> 	<p>Anxious predictions Catastrophising</p> <p>Labelling self</p>	<p>FOR: I haven't been to practice for a while The manager said we all needed to improve</p> <p>AGAINST: The last time I went, my manager said I did well I used to get picked for matches I usually work hard at practice</p>	<p>It might be difficult to play initially as I haven't played for a while, but I won't have forgotten all my skills. Worried 50% Anxious 40% Guilty 40%</p> 

Have a go at completing your own thought diary below. Using the questions in each section below and David's example may help you with this. If possible, try to complete the diary when you notice feeling anxious or low, so you can identify exactly what is happening there and then.

Situation	Emotions & Body Sensations	Thought	Biased Thinking Patterns	Evidence for & against thought	Alternative thought – re-rate emotion

IDENTIFYING YOUR RULES FOR LIVING

As previously discussed, rules for living can influence behaviour as well as thoughts. However, before this is considered it is useful to identify your own rules for living that relate to perfectionism. You may have unhelpful rules in one or many different areas of your life. By uncovering your rules, you are putting down on paper what you consider you have to do, or be, in order to feel good about yourself.

Identifying your rules in an “If....Then...” format can be helpful. The first part of the statement relates to the high standards and the second part relates to what the feared outcome will be. For example:

- “If I do not get at least a 2:1 degree then I will never succeed in life”
- “If I am not thin then no-one will find me attractive”
- “If I do not make clever and funny comments then people will not like me”
- “If I tell people how I am really feeling then they will reject me”
- “If I don’t strive to achieve higher standards each time, I am a lazy and useless person”
- “If I do not do things perfectly, that means I have failed”
- “If I try, I will only fail”
- “If I make a mistake, then I will be rejected”
- “If I put my work out there, then others will think badly of me”
- “If I do not know what is going to happen then I won’t be able to make sure everything goes ok”
- “If I am not prepared for all possible outcomes then I won’t be able to cope when things go wrong”
- “If I let other people do a task then they may make mistakes which would mean we have failed”
- “If I do not try to be perfect then others will realise what I am really like”
- “If I do not work all the time then I will become lazy”
- “If I have not worked extremely hard then I do not deserve a treat”
- “If I don’t always do the right thing by my friends, I am a bad person”



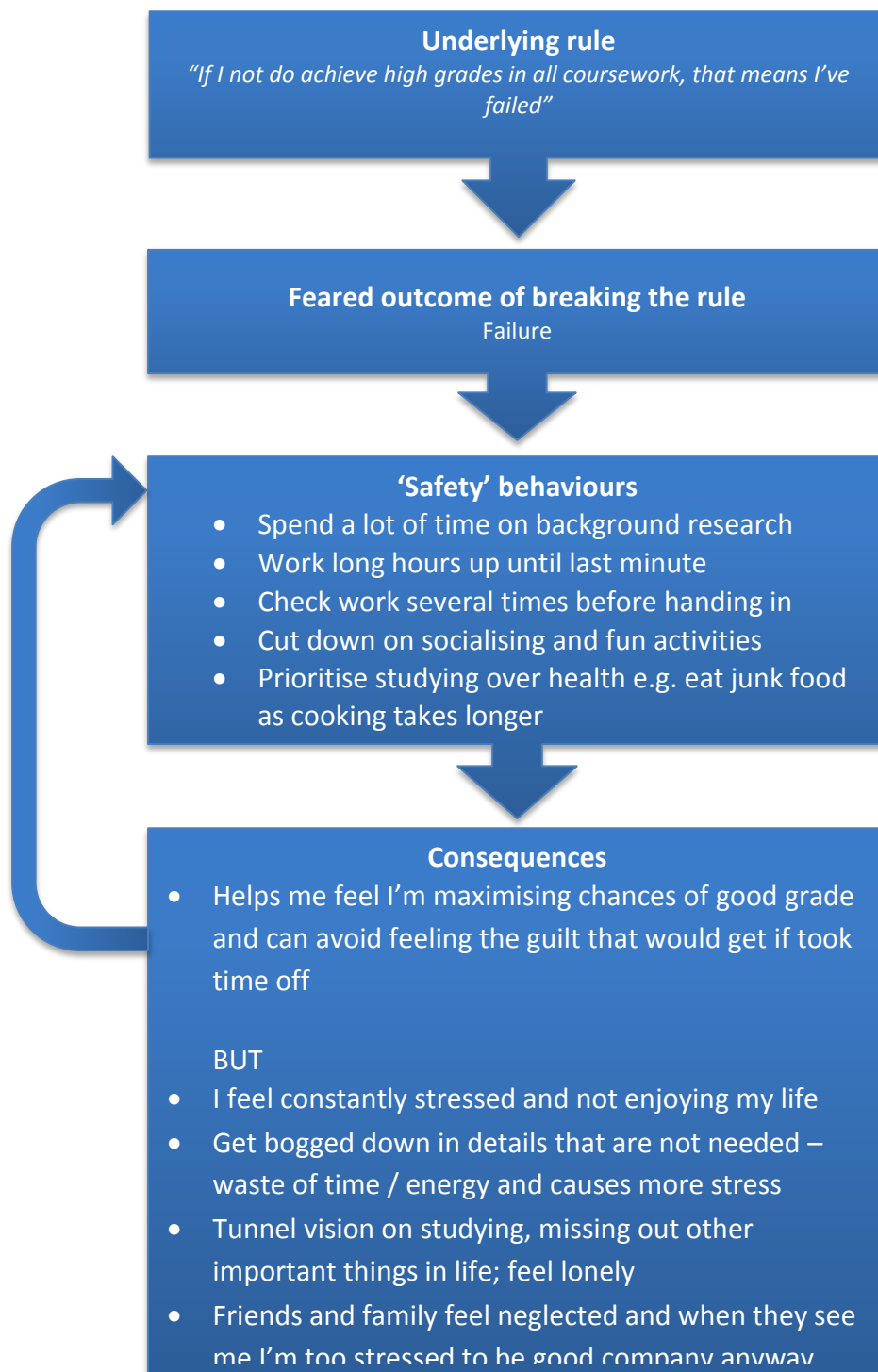
In order to identify your unique rules, think about frequent worries and self-critical thoughts that you have, and information you've received from important people around you about ways to act. Try to identify your rules if the "If...Then..." format.

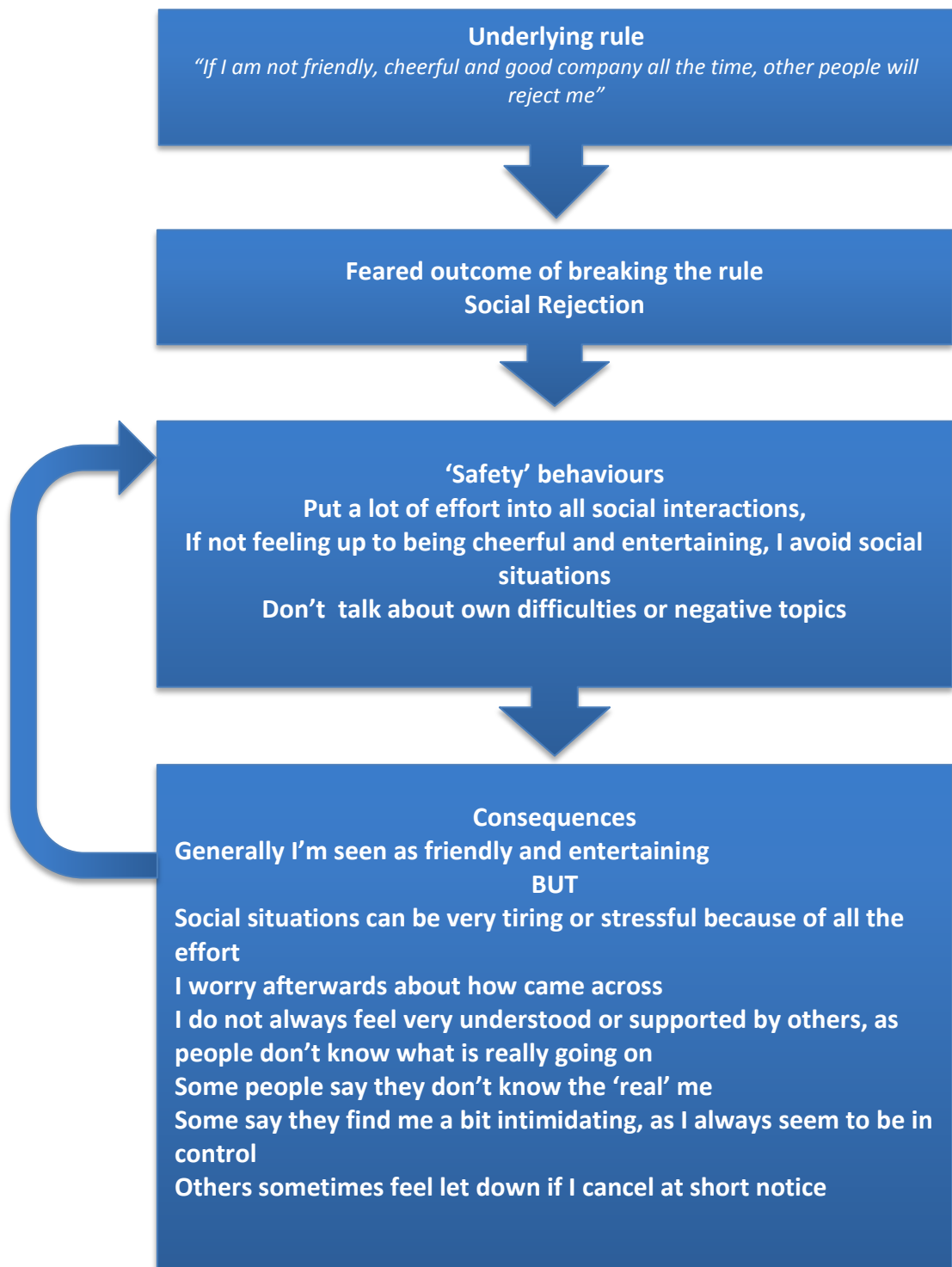
Top Tips for identifying your rules:

- **Negative emotions:** If you notice that your mood becomes worse quite suddenly, this could indicate that one of your rules for living has been broken by yourself or someone else. If this happens, try to identify what happened immediately before you started to feel this way, as this could help with identifying one of your rules. For example, if you realise that you felt frustrated or upset after receiving an essay mark (despite it being a high grade) it could be possible that you hold a rule such as "If I don't strive to achieve higher standards each time, I am a lazy and useless person", if you had received the same grade for your last essay.
- **Using your thoughts diaries:** Your thought diaries (from the previous section) could also help if you are struggling to identify your rules for living. Look for themes in your negative thoughts, as similar thoughts are likely to have been caused by the same rule. For example, if you had lots of negative thoughts surrounding people noticing that you had not practiced at a sport, perhaps you hold the rule for living, "If I do not practice enough, then everyone will think that I am a failure".

PERFECTIONIST BEHAVIOURS

As we have seen, perfectionists can **act** in particular ways as a result of their underlying rules and beliefs. Often these behaviours are aimed at preventing the feared outcome specified in the underlying rule. Sometimes they are known as “Safety Behaviours” for this reason. Most of these behaviours have both advantages and disadvantages. The advantages an individual experiences can help to maintain the ‘safety’ behaviours. Some examples are shown below:





Just as thoughts influence our feelings and behaviours, behaviours also often serve to maintain perfectionistic rules. The unhelpful coping behaviours that perfectionists engage in can help reduce anxiety in the short term, but in the long term keep them from learning whether or not these rules are true.

The types of behaviours that perfectionists engage in can be divided into two categories – the things you **do** as a result of your perfectionism and the things you **avoid** doing:

Active Behaviours You may find yourself doing things in order to meet your perfectionist standards. You may see these behaviours as necessary, while others might view them as excessive. Examples include:

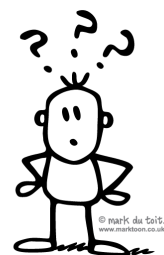
- Spending a lot of time on your perfectionist area (e.g. working / exercising / attending to appearance)
- Excessively checking for mistakes or seeking reassurance
- Excessively organising or making lists
- Correcting others or being self-critical
- Always putting others' needs before one's own
- Taking on too many things at once and not letting others help you
- Keeping constantly busy



Note: In small amounts, some of these behaviours can be helpful, but engaging in them excessively can inadvertently cause other problems, including reduced performance, extra stress and worse overall quality of life.

Avoidance Behaviours You may also find yourself avoiding doing things. Although this may not appear to be perfectionism, avoiding doing things may help when you fear that you might fail to meet your perfectionist rules and assumptions. Examples include:

- Procrastinating
- Waiting to the last minute to do a task
- Giving up too soon
- Indecisiveness
- Avoiding tasks that you fear you are unable to do adequately
- Avoiding social situations
- Avoid asking for help or support because think should be able to cope on own



Consequences of perfectionist behaviours These perfectionist active and avoidance behaviours can have the counter-productive effect of impairing your performance or achievements. Or they may be adversely impacting your quality of life.

How these behaviours maintain perfectionism The types of behaviours described above can appear very helpful in the short term, as they can reduce the anxiety associated with your perfectionist rules. However, in the long term, acting in these ways can keep your perfectionism going, and can prevent you learning that these unhelpful behaviours are not necessary.

For example, active behaviours, such as checking your essay many times before handing it in for mistakes, prevents you from learning that if you had not carried out these checks, you would still have got a high mark even if there had been one or two small errors. It maintains the belief that producing perfect coursework is the only way to avoid failure. Avoidance behaviours can work in a similar way. For example, if you avoid giving in coursework that you are not happy with for fear of it being evaluated as not good enough, and ask for an extension, you do not learn that the coursework would have been good enough anyway. Alternatively, you might avoid picking up your marked coursework for fear of evaluation or failure.



Separately note down your perfectionism active and avoidance behaviours below:

Behavioural Experiments One way of testing the accuracy and helpfulness of your unhelpful perfectionist or safety behaviours is to see what happens when you act differently. Behavioural experiments allow you to do this. You can work on both 'active' and 'avoidant' safety behaviours.

Here are the steps for carrying out your own behavioural experiment:

1. Planning your experiment

- Identify the perfectionist behaviour that you would like to experiment with. Write down a prediction about what will happen if

you behave differently. Rate how strongly you believe this on a scale of 0-100.

- Identify an alternative, more flexible rule and rate how strongly you believe this (0-100).
- Consider how you can test the effects of reducing your safety behaviour. Plan exactly what to do, when to do it, where to do it, who with and how long for. Also think about possible problems in carrying out the experiment and how to overcome these.

2. Conduct your experiment

- Carry out the experiment as you planned and describe exactly what happened when you did it.

3. Reflect on your experiment

- Reflect on what exactly happened in your experiment and what you can learn from this. What does this say about the safety behaviour you were testing? How strong is your belief in the consequence of reducing your safety behaviour now (0-100)?

Note: It is important to remember that not everything we think is inaccurate, or completely untrue. Should your unhelpful rules or assumptions be partially supported in your experiment, try to think about whether there is another explanation for what happened.

Identify perfectionist behaviour & predictions	<ul style="list-style-type: none"> • <i>Avoiding football training</i> • <i>Prediction: I won't play well enough which will annoy other team members and I'll feel bad about myself</i>
Identify alternative way of thinking (rate 0-100)	<ul style="list-style-type: none"> • <i>Even if I don't do as well as I want to, with more practice I'll get better. If people are annoyed with me, I will be able to cope. None of them play perfectly all the time (20%)</i>
Plan behavioural experiment	<ul style="list-style-type: none"> • <i>I will go to training on Monday and see what happens</i>
Describe what happened in behavioural experiment	<ul style="list-style-type: none"> • <i>I felt a bit anxious just before but once I was there it was fine & people were friendly. It wasn't the best I've ever played but it wasn't as bad as I'd feared. It's so enjoyable that it is worth doing even if I get a bit stressed beforehand.</i>
What can you learn from experiment? (Re-rate 0-100)	<ul style="list-style-type: none"> • <i>Rating for alternative way of thinking: 90%</i> • <i>I really enjoyed it and feel much more confident about going next time</i>

Identify perfectionist
behaviour & predictions

Identify alternative rule
(rate 0-100)

Plan behavioural experiment

Describe what happened in
behavioural experiment

What can you learn from
experiment? (Re-rate 0-100)

Using small steps to change behaviour Understandably, people can find it daunting to try behavioural experiments. If this is the case for you, it can be helpful to plan a series of smaller steps leading up to that which you are finding more difficult. This is sometimes known as creating a 'hierarchy'. Using this process, you can begin testing out smaller safety behaviours first, and then work up to those that feel harder.

For example, Sarah set up a hierarchy of some of her safety perfectionist behaviours below, starting with the easiest and building up to the most difficult:

1. Try putting a mistake in a text message to a family member or friend
2. Deliberately leave a typo in a non-assessed presentation in a seminar
3. Cut down time spent on background reading for literature reviews and essays
4. Reduce number of times I check my essay (currently three times, reduce to once)

Managing Change If you have decided that you would like to change one or more of your perfectionist behaviours, here are some tips to help along the way:

- **Give it a go:** If you sometimes find it hard to make the changes you're trying to – give it a go and see what happens.
- **Have a giggle:** If you're feeling stressed, try to find something that makes you smile. Having a giggle and feeling a bit more relaxed can help you try new things.
- **Allow mistakes:** We all make mistakes and we can learn from these!
- **Remember the cons:** Remind yourself of the exercise above and the cons of perfectionism for you.
- **Treat yourself regularly:** Give yourself a reward when you try something new

ADJUSTING RULES FOR LIVING

Having considered the influence of your rules for living on your thoughts and behaviour, you may decide it would be useful to try and reduce the negative impact of certain rules. One way to do this is by adjusting these rules.

Adjusting Your Rules Adjusting your unhelpful perfectionist rules, so that they are more accurate, reasonable and/or flexible, can help you overcome some of the difficulties associated with them guiding how you **think, act** and **feel**.

Challenging and adjusting your unhelpful rules can also help you begin to feel good about yourself, which can often be difficult when unhelpful rules are not met.

To begin adjusting your unhelpful perfectionist rules, choose one unhelpful perfectionist rule and note down your thoughts about the following questions:

- What impact has this rule had on your life?
- How do you know that the rule is in place? (e.g. how do you think, act, and feel?)
- What factors might have contributed to the development of this rule?
- In what ways is the rule unreasonable, unrealistic or inflexible?
- What are the advantages of having this rule?
- What are the disadvantages of this rule?
- What alternative rule would be more realistic and helpful?
- What do I need to do to try this new rule out?

Remember - these unhelpful rules may have been in place for some time. This means that they won't change overnight, so try to focus on one unhelpful rule at a time.



Adjusting My Rules: Example

Here is an example of David adjusting one of his rules:

My old rule is: If I don't do my very best, I'll let others down

Factors that contributed to the rule are: I have always wanted to do well in sports and my Dad encouraged me to do this when I was younger. I wasn't good at some other things and had been bullied so the positive feedback about my sporting performance made me feel better about myself. It felt really good to make my Dad proud.

BUT, the rule is unreasonable because: It's not possible to do my best all the time and other people will understand that.

The advantages of having this rule are: Most of the time, I work very hard to do my best. As a result, I have done well at work and feel good about this. My Dad has said he is proud of me.

BUT, the disadvantages of having this rule are: I constantly feel under pressure to do well, I am always worried about my performance and my body feels tense. I have stopped going to football training because of this, and have not spoken to many friends for a long time.

An alternative, more helpful rule would be: I can try to do my best while taking into account that my performance will be affected by what else is going on in my life. Other people will support me doing this and generally not feel let down if this doesn't happen.

To try out this rule, I need to:

- Go to football practice even if I'm feeling tired or unmotivated
- See what happens at football practice if I only put in 70% effort rather than 100%
- Pay attention to how people respond if I or someone else makes mistakes. Do they seem let down? Even if they are annoyed or upset, how long does this last?
- Practice saying 'no' when my family asks me to do something that is actually very difficult for me or I really don't want to do.
- Meet up with friends even if I'm not feeling that great
- See what happens if I am not constantly trying to be funny and entertaining with my friends.



Adjusting my Rules

Have a go at adjusting one of your rules in the space provided below (or on a separate sheet) using the questions as guides:

My old rule is:

Factors that contributed to the rule are:

BUT, the rule is unreasonable because:

The advantages of having this rule are:

BUT, the disadvantages of having this rule are:

An alternative, more helpful rule would be:

To try out this rule, I need to:

RECOGNISING YOUR STRENGTHS

Perfectionist thinking can mean that you don't pay as much attention to your positive qualities, or quickly discount them. Thinking positively about yourself and acknowledging that you have strengths can feel very uncomfortable and frightening. It's important, to accept the good points about yourself, as well as the bad points though, just as you accept them in other people.

Exploring your strengths & talents We all have a unique combination of qualities, skills, interests and passions. Reminding yourself of your own personal strengths can help you develop a more positive view of yourself. It might also show you to what extent you ignore or discount the positives about yourself.



See the next page when David reminded himself of his strengths and talents at different ages throughout his life.



Note down on page 40 as many of the good things about yourself as you can think of. It might feel hard to do this at first - but don't worry - take a look at David's example to help. Ask yourself what skills you have developed throughout your life, and what positive qualities you have (however small). Think about how other people would describe you and about any negative qualities that you do not have. Keep this list somewhere safe and keep adding to it.

Examples of strengths and achievements throughout my life

Before Age 5

- Mum says that I coped well with nursery school and made some friends. Learnt to read and count a bit before started school. Dad says that I had a good sense of humour and he used to enjoy reading me stories because I always laughed at his jokes.

Age 6 - 10 years

- Helped Mum look after sister when she was born. Mum was grateful that I was easy to look after when my sister was so ill. Had lots of friends including best friend Sam. Learnt to play the flute. Survived being bullied because I wore ugly glasses. Supported someone else who was being bullied. My grandparents said they loved having me to stay.

Age 11 - 15 years

- I did fairly well at school and enjoyed spending time with my friends. I was in the school football team and running club. I walked my little sister to her school as it was on the way to mine. I was nominated as a school prefect.

Age 16 - 18 years

- Passed all my GCSE's. Went on a trip away with school friends. Got my first part-time job at Tesco. Helped my sister with her school work. Started college. Had close friends.

Currently

- I have a pretty good job and get on well with my colleagues. I have a girlfriend, Lucy, who I care for and enjoy spending time with. Went traveling last year to Australia. Help my parents with DIY and work they need doing around the house. Helped my sister move to start college. I can make my friends laugh a lot.

Examples of strengths and achievements throughout my life

Before Age 5

Age 6 - 10 years

Age 11 - 15 years

Age 16 - 18 years

Currently

Positives notebook Now that you've got some of your positive strengths and achievements noted down, the aim is to become aware of these in everyday life. The positives notebook can help with this.



In a new notebook, write down examples of when you use your good points, skills or qualities in everyday life. Try to do this as they happen. Each time note down what you did and the quality, skill, strength or talent that it illustrates.

Aim to record three examples everyday. It does not matter how big or small they are. Initially, you will need to make a conscious effort to notice these qualities and write them down, but, with time, this will become your 'default' way of thinking. See Sarah's example below.



Monday

- *Bought Sophie some flowers for her birthday (kind)*
- *Let someone else out when driving home (thoughtful)*
- *Called mum to see how she is (caring)*

Tuesday

- *Helped a new student find his way to library (helpful)*
- *Did the hovering (tidy)*
- *Talked to a friend about essay we have to do (helpful)*

Wednesday

- *Did my hair in a slightly new style (creative)*
- *Lent a book to my friend (thoughtful)*
- *Told my flat-mate a joke which she laughed at (funny)*

Thursday

- *Cooked a new curry for dinner (creative cook)*
- *Changed the light bulb in my room (practical)*
- *Fixed a problem with my laptop (practical)*

Enjoyment diary Recognising your **strengths and qualities** and rewarding yourself for them is very important. Make sure that you do at least one thing every day that brings you true pleasure. This is not a luxury or an indulgence – it is essential for your mental health. This, however, is not just about feeling good – when your mood is lifted, it's also easier to fight self-criticism (and biased thinking) and stop the vicious cycle of perfectionism.



As part of the Enjoyment diary, for a week note down exactly what you do hour-by-hour. Try to keep the diary with you and fill it in regularly throughout the day. This is important so that you have lots of detail. Each hour separately rate the amount of enjoyment (0-10) the activity gave you. After a week, review what you have recorded and reflect on your enjoyment ratings. Think about what you can learn from these records, and things you would like to do more or less of. In line with these observations, begin to make small changes to your daily activities to ensure you have activities that provide a sense of enjoyment.

See David's Enjoyment diary on the following page.

	MON	TUES	WEDS	
6-7	Sleep!	Sleep!	Sleep!	
7-8	Sleep!	Get up, breakfast E=4	Sleep!	
8-9	Get up, breakfast E=3	Walked to work E=7	Get up, breakfast E=3	
9-10	Work E=5	Work E=6	Work E=6	
10-11	Work E=5	Work E=6	Work E=6	
11-12	Work E=5	Work E=6	Work E=6	
12-1	Lunch with colleagues E=8	Lunch with Lucy E=9	Lunch at desk E=5	
1-2	Work E=6	Work E=5	Work E=5	
2-3	Work E=6	Work E=5	Work E=5	
3-4	Work E=6	Work E=5	Work E=5	
4-5	Work E=6	Work E=4	Work E=5	
5-6	Walk home from work E=7	Walk home from work E=7	Walk home from work E=7	
6-7	Called mum E=7	Dinner E=6	Cooked dinner E=8	
7-8	Dinner E=7	Watched TV E=6	Dinner E=8	
8-9	Listened to music E=7	Watched TV E=6	Evening with Lucy	

From completing his pleasure diary, David noticed the following:

- I get most enjoyment when being with other people e.g. lunch time
- I find it difficult first thing in the morning, but enjoyed the walk to work the morning I did it
- Cooking dinner for myself and Lucy was very enjoyable
- Listening to music and reading gave me lots of pleasure

	MON	TUES	WEDS	THURS	FRI	SAT	SUN
6-7							
7-8							
8-9							
9-10							
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CREATING A BALANCED LIFE

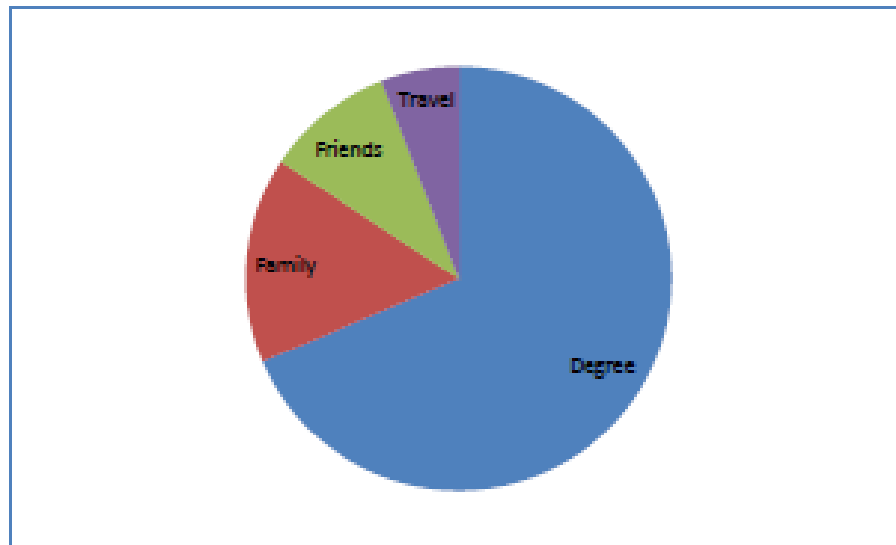
Perfectionists tend to be very focused on meeting their rules for living within the areas related to their perfectionist beliefs. This might be focusing on getting a first in your degree, ensuring that your weight is kept at a certain level, or that your sports team always wins their games. Perfectionists can often find that they concentrate a lot of effort and attention on the area that their perfectionist beliefs are centred on in order to feel good about themselves. All this effort and attention on areas *only* concerned with perfectionist rules can have a big impact on your life balance.



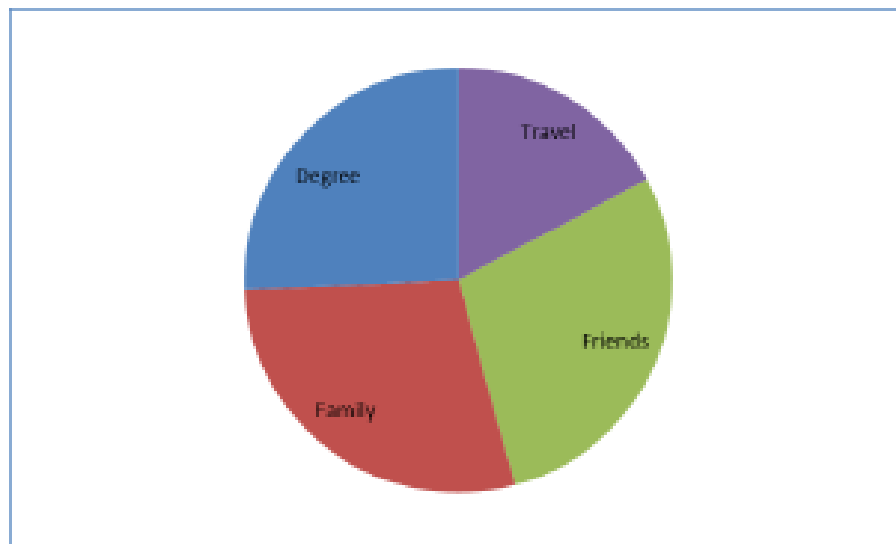
Areas of Life Pie Chart Focusing all of your attention on the areas of life in which you hold your perfectionist rules can create an imbalance. Engaging in **all** areas of life – including relationships, hobbies, leisure activities, work or studies - is important for our wellbeing.



In order to look at her life balance, Sarah completed the areas of life pie chart below. To do this, Sarah initially noted down the areas of life currently important to her and then ranked them in order of most to least important. Using this, Sarah drew the pie chart below illustrating her current life balance:



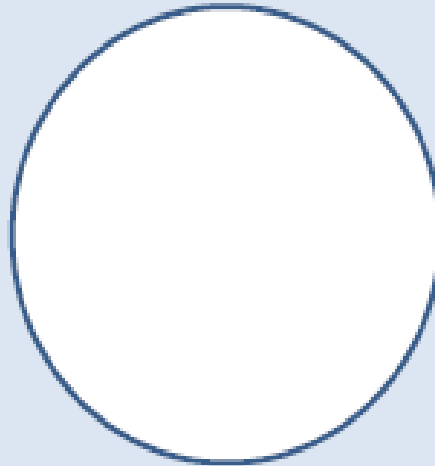
When thinking about how Sarah would like the areas of her life to be balance, she drew the following pie chart:



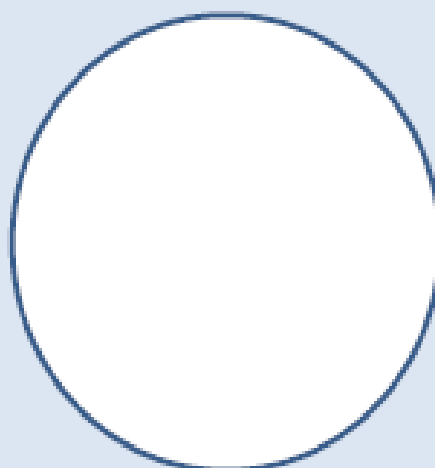


In order to look at your life balance, have a go at completing the areas of life pie chart below. To do this, initially note down the areas of life that are of important to you and rank them in order of most to least important.

How my life is now:



Now draw a pie chart showing how you would like your life to be, with areas that are more important taking up a bigger area of the chart:



Extending other Life Areas After having completed the Areas of Life Pie-Chart – ask yourself whether you are happy with the balance of things in your life? If the answer is ‘No’, then you might want to consider extending those areas of your life that are important to you, but that are not receiving as much attention as the main area(s) you identified. This will help you create a more balanced life and not concentrate on only one or two areas only.



In order to help you create a balanced life, firstly note down the areas of life that you would like to pay more attention to. This could be anything from seeing friends and family more regularly, starting a new hobby, or looking after your health.

Choose one area to start with, and think of some activities that you would like to do related to it. For example, if Sarah decided that she would like to see her family more often – she may begin by calling her mum in the week and finding out if she is available to meet up at the weekend. Try to be specific with the activity that you would like to do, and plan when you can do it.

Area:

Activity:

Plan:

Activity:

Plan:

MOVING FORWARD

This final section is an opportunity to review what you have learnt from using this booklet so far and can also help you think about how to continue moving forward to overcome difficulties you might be experiencing as a result of perfectionism.

Try answering the questions below to continue thinking about how to move forward:

What have I learnt about my perfectionism? What was the most useful thing I learnt?

What were my most unhelpful thoughts? What other ways of thinking about these thoughts have I developed?

What were the most helpful behavioural experiments I tried? What did I learn from these? Is there anything that I do differently now?

How am I going to continue to build on what you have learned?

What type of future events would make things difficult? What do I need to do in these situations to maintain my gains?

FURTHER READING

Perfectionism If you would like to read more about perfectionism you could try::

- Shafran, R., Egan, S., & Wade, T. (2010). *Overcoming perfectionism: A self-help guide using Cognitive Behavioural Techniques*. London: Robinson.
- Antony, M.M., & Swinson R.P. (1998). *When perfect isn't good enough: Strategies for coping with perfectionism*. Oakland, CA: Raincoast Books.

Other problems Perfectionism often occurs alongside another problem. If you are experiencing difficulties outside of perfectionism, and would like information about helping with these, the “Overcoming...” series can be particularly useful. Below are some examples and the website address which has a list of all books in the series:

- Butler, G. (1999). *Overcoming social anxiety and shyness: A self-help guide using Cognitive Behavioural Techniques*. London: Robinson.
- Gilbert, P. (2009). *Overcoming depression: A self-help guide using Cognitive Behavioural Techniques* (3rd ed.). London: Robinson.
- www.overcoming.co.uk

ACKNOWLEDGEMENTS

We are very grateful to Kate Roberts for all her help with this booklet including proof- reading, formatting and illustrating. Thank you Kate!

The approach described in this book draws on the models and writing of therapists such as Aaron T. Beck, Melanie Fennell, Roz Shafran, Tracey Wade, Sarah Egan and Chris Fairburn.

**Well done for taking the
time to think about your
perfectionism.**

Good luck for the future!

Appendix U – Main Research Project
Participant Information Sheet (Bath University)

INFORMATION SHEET

A PILOT STUDY OF MINDFULNESS-TRAINING
COMPARED TO PSYCHO-EDUCATION FOR PERFECTIONISM

You are being invited to take part in a research study. Before you decide whether you would like to take part, you need to understand why the research is being done and what it would involve. Please take time to read the following information carefully and discuss it with friends, relatives and your GP if you wish. If there is anything that is not clear, or if you would like more information, please do not hesitate to contact Kirsty James or Dr Kate Rimes (k.m.james@bath.ac.uk / k.a.rimes@bath.ac.uk). Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the purpose of this study?

This is a small scale, pilot research trial, which is designed to make some preliminary investigations into the effects of mindfulness meditation training compared to written psycho-education material for people who are experiencing difficulties as a result of perfectionism. This study has been designed by clinicians and researchers (Dr Kate Rimes; Kirsty James).

Why have I been invited?

We are recruiting undergraduate and postgraduate students who have responded to advertisements for the study on the University of Bath campus. Some students currently or previously in contact with the Health and Well-Being Team have also been contacted about participating in this research study.

We aim to recruit a maximum of 15 individuals for both the mindfulness-training group (due to run for 8 weeks from 22nd October 2012 (5.15 – 7.15pm)) and provision of written psycho-educational materials.

Am I eligible to take part?

You may be eligible to take part if you are currently experiencing negative effects as a result of your perfectionism or very high expectations of yourself. This will be assessed by your scores on questionnaires and a discussion with one of the researchers.

Although perfectionism can have positive effects, it can also have negative consequences. For example, perfectionism can make people feel very stressed about their academic work or worry a lot about what others think of them. They might become very upset if they make a mistake or do not do as well as they would like. Sometimes they spend so much time keeping up with one's high standards (e.g. in studying, physical fitness, weight control or cleaning etc.) that other areas of their life suffer. Sometimes perfectionism leads to procrastination and putting off starting work so that everything is left until the last minute.

Participants must be aged at least 18 years and be an undergraduate or postgraduate student at the University of Bath. There are certain reasons why people may not be suitable, which would be explained at the assessment interview. This includes having current problems that would interfere with one's ability to benefit from such help, for example, a serious health problem such as anorexia nervosa.

If you take part in this study you would need to be available to take part in the mindfulness meditation classes on Mondays at 5.15pm from 15th October 2012, in case you are randomly allocated to the mindfulness training group.

Do I have to take part?

It is up to you whether you take part or not. If you do decide to take part, you will be asked to sign a consent form.

Having signed the consent form, you are still free to withdraw at any time and without giving a reason. A decision to withdraw, or a decision not to take part, will not affect any other care that you may receive, such as through the NHS or the student support services.

What will happen to me if I take part; what will I have to do?

Sometimes we don't know which way of helping people is best. To find out, we need to compare different forms of help. Firstly, we collect information about participants before any help has started. We then put participants into groups and give each group a different form of help; in this case, either an eight-week group of mindfulness training or a booklet with advice about perfectionism. To make sure the groups are the same to start with, each participant is put into a group by chance (randomly). It is not possible for you or the researchers to choose which group you will be in. If you choose to take part, a research assistant will open an envelope which will tell us which group you will be in, and we will let you know. Participants then complete the same questionnaires and attend an interview approximately two months later and then again after another 3 months. This allows us to see whether there have been any changes before and after help has been provided and whether these changes last over several months. Because this is a pilot trial we will not be able to know for sure whether one is better than the other, but we will gather information about how helpful they both are.

Beforehand

If you decide to take part, you will be sent a questionnaire pack and invited to an assessment. The questionnaires take about 20-30 minutes to complete. These are for you to complete in your own time, but assistance is available if you would like. The interview will be held at the University or on the telephone and will last about 60 minutes. This interview will ask about how perfectionism affects your life. At this time, we will also ask for you to provide your GP details. Your GP will only be contacted if the clinicians feel concerned that there is a risk to your safety or the safety of other people.

Which form of help?

You will then be randomly assigned to either mindfulness meditation training or to receive written psycho-educational materials. You have 50% chance of receiving 8-weeks of group mindfulness-training and 50% chance of receiving written psycho-educational materials. We will write to you once we have all the participants for the study to let you know which group you have been allocated to.

Mindfulness training

What is mindfulness?

- Mindfulness means deliberately paying attention to different aspects of our experience on a moment to moment basis. This can help us to deal with difficulties and symptoms more effectively. Being mindful gives us the opportunity to respond

to difficult events and situations in new ways, rather than just following old patterns.

- Being mindful means adopting a kind, compassionate, open attitude, stepping outside the mind's tendency to judge anything and everything.
- Mindfulness is a skill that we all have and can develop further.

The approach used in this group will be based on the principles of Mindfulness-Based Cognitive Therapy and Mindfulness-Based Stress Reduction. Classes last for two hours and will be held on Mondays at 5.15pm for eight consecutive weeks [starting 22nd October, 2012]. Each class involves guided meditation practice which lasts for up to 45 minutes at a time. The practices may involve lying down or sitting or doing gentle stretching. If there are any activities in which you do not wish to participate, you will be free to either do a modified form of the activity or do nothing at all. You can leave the room to take a break at any time you wish. Classes also involve discussion of your experiences of practicing mindfulness meditation but you do not have to talk in the class if you do not wish to. The classes will include information about perfectionism, and how to do things differently so that perfectionism has fewer negative effects on you, while keeping any positive effects of perfectionism.

Although group sessions can seem daunting, they can have many benefits. For example, you can develop both from active participation and from observation; you have the opportunity to give and receive immediate feedback; and you have the opportunity for support from people who are experiencing similar difficulties.

Written Psycho-educational Material

If you are randomly assigned to the Psycho-education group, you will be given a written booklet about perfectionism. This contains information about perfectionism and factors that might explain the impact that it is having on your life. It also provides advice about specific techniques to try to help participants try to overcome unhelpful aspects of their perfectionism, while holding onto any positive effects that it might have

Afterwards

Eight weeks later, you will be asked to complete another set of questionnaires and come to a second, shorter interview (that will last approximately 30 minutes). In this interview you will be asked for feedback about your experience of the mindfulness meditation training or psycho-education, including what was helpful and not so helpful. Three months after this, you will be asked to complete a final set of questionnaires.

Data and audio recording

In order to be able to analyse the data from the study, we will ask for your consent for members of the research team to have access to your questionnaire responses. All of your completed questionnaire responses will be anonymised by labelling them with a number rather than with your name. They will be stored securely at the University of Bath. We will also ask your permission to audio record the assessment sessions (and group sessions if you are in the mindfulness training group), for supervision purposes and so that we can check that the groups were being run according to the research protocol.

Other forms of help for perfectionism

We ask that you do not have any other form of help (e.g. counselling) for your perfectionism during the first eight weeks of the study, otherwise we will not be able to tell whether there has been any impact of the help that we have provided. If you take part, you can continue taking any medication. If you are taking antidepressant medication, you need to have been on a stable dose for at least three months before starting this study.

What are the alternatives for help with perfectionism?

You are free to choose not to participate in this research trial. If you do not want to participate in the trial, you will continue to be able to seek other available help.

What are the possible risks or disadvantages of taking part?

As with any form of help that focuses on psychological issues, you may sometimes feel emotionally distressed. The clinicians are trained and well experienced in running groups and will be available to be contacted between sessions.

A possible disadvantage is the inconvenience of the questionnaires and interviews. These have been kept to a minimum and will be done in a way that is as convenient for you as possible. It is also possible, though unlikely, that you might experience some emotional distress as a result of completing some of the questionnaires. Support will be available to you in this event. A second possible disadvantage is that you will be randomised to one of the two conditions (mindfulness-training or written psycho-educational materials) rather than choosing which therapy you would like.

What are the potential benefits of taking part?

If you decide to take part then you will be offered help for negative effects of perfectionism. Whilst we expect these forms of help to be of benefit to you, we cannot guarantee this.

What will happen if I don't want to carry on with the study?

You are free to withdraw from treatment at any stage. If you withdraw, we will need to use the data collected up to your point of withdrawal, but this will only be available to members of the research team and will not be stored with information that can identify you. With your permission, we would also like you to complete post-intervention questionnaires and attend the interview despite you not completing the group. However, you will retain the right not to do this if you so choose.

What if there is a problem?

It is unlikely that this therapy will cause you any harm. Psychologists will be available at every stage of your involvement. If you have a concern about any aspect of this study, you should contact Kirsty James (k.m.james@bath.ac.uk) or Kate Rimes (k.a.rimes@bath.ac.uk). If you remain unhappy, you have the right to complain to the University of Bath about any aspects of the way you have been approached or treated during the course of this clinical trial.

Confidentiality – who will know that I am taking part in this study?

All information relating to you participating in this study will be securely stored, either on a password-protected University of Bath computer, or locked in a University of Bath filing cabinet. No completed questionnaires will be labelled using your name or any other identifiable information. Instead, each questionnaire will be labelled with a unique identification number.

The only people who will have access to your data from the study will be the research team.

Ethical Approval

This study has been approved by the University of Bath Psychology Ethics Committee. If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you can contact the Chair of the Ethics Committee, Department of Psychology, University of Bath, Claverton Down, Bath, BA2 7AY, phone: (01225) 383061.

For further information

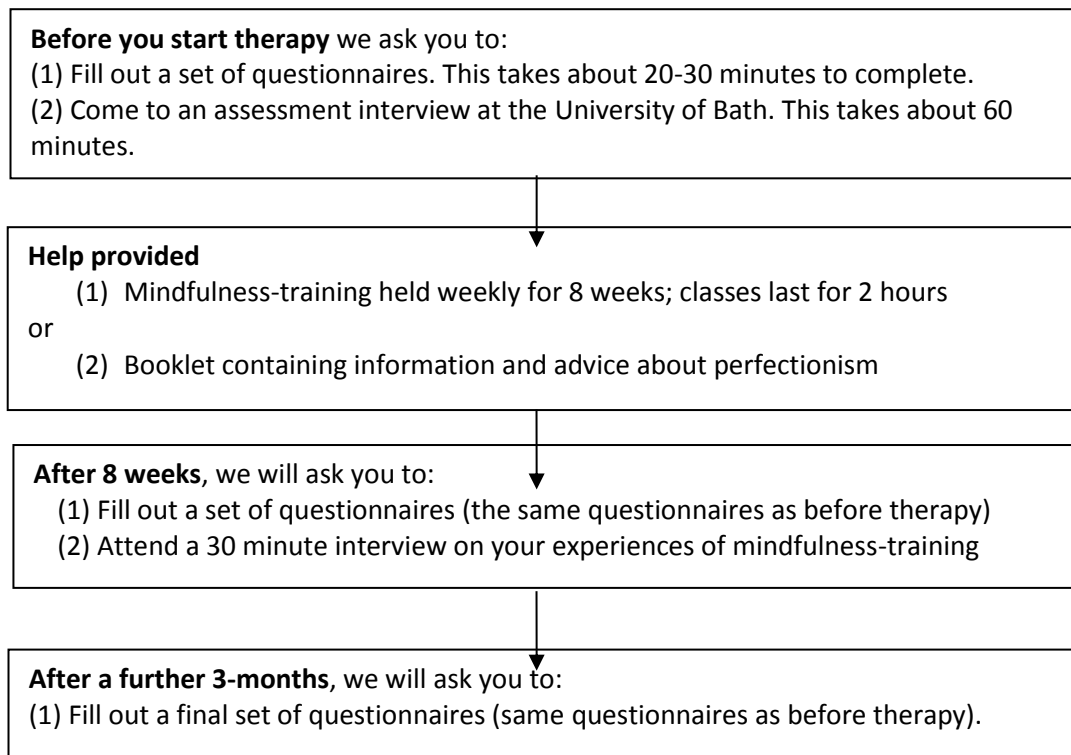
If you would like any further information about the trial, please do not hesitate to contact Kirsty James or Dr Kate Rimes (k.m.james@bath.ac.uk / k.a.rimes@bath.ac.uk).

Thank you for taking time to read this information pack.

Summary

- **Participation is voluntary. You have the right to choose not to participate, or to stop participating in the trial at any point and without consequence.**
- **All the information you provide throughout the trial will be completely confidential. However, if a member of the team is given reason to believe that your health may be at risk or you may harm yourself or others, we may contact your GP or other relevant parties..**
- **This information sheet is for you to keep. If you decide to participate, you will also be provided with a copy of the signed consent form.**
- **For any further information, please contact Kirsty James or Kate Rimes (k.m.james@bath.ac.uk / k.a.rimes@bath.ac.uk).**

The following flowchart outlines what you will be asked of you if you decide to take part:



Appendix U – Main Research Project

Participant Information Sheet (KCL University)

INFORMATION SHEET FOR PARTICIPANTS

REC Reference Number: PNM 1213 154



YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

A PILOT STUDY OF MINDFULNESS-TRAINING COMPARED TO PSYCHO-EDUCATION FOR PERFECTIONISM

We would like to invite you to participate in this postgraduate research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

What is the purpose of this study?

This is a small scale, pilot research trial, which is designed to make some preliminary investigations into the effects of mindfulness meditation training compared to written psycho-education material for people who are experiencing difficulties as a result of perfectionism. This study is part of a doctoral research project. This study is being conducted by Kirsty James, a clinical psychologist in training at the University of Bath and honorary researcher at King's College London, together with Dr Katharine Rimes, a clinical psychologist and senior lecturer at King's College London.

Why have I been invited?

We are recruiting KCL undergraduate and postgraduate students who have responded to advertisements for the study.

Am I eligible to take part?

You may be eligible to take part if you are currently experiencing negative effects as a result of your perfectionism or very high expectations of yourself. This will be assessed by your scores on questionnaires and a discussion with one of the researchers.

Although perfectionism can have positive effects, it can also have negative consequences. For example, perfectionism can make people feel very stressed about their academic work or worry a lot about what others think of them. They might become very upset if they make a mistake or do not do as well as they would like. Sometimes they spend so much time keeping up with one's high standards (e.g. in studying, physical fitness, weight control or cleaning etc.) that other areas of their life suffer. Sometimes perfectionism leads to procrastination and putting off starting work so that everything is left until the last minute.

Participants must be aged at least 18 years and be an undergraduate or postgraduate student at KCL. There are certain reasons why people may not be suitable, which would be explained at the assessment interview. This includes having current

problems that would interfere with one's ability to benefit from such help, for example, a serious health problem such as anorexia nervosa.

If you take part in this study you would need to be available to take part in the mindfulness meditation classes on [date / time to be inserted], in case you are randomly allocated to the mindfulness training group.

Do I have to take part?

It is up to you whether you take part or not. If you do decide to take part, you will be asked to sign a consent form.

Having signed the consent form, you are still free to withdraw at any time and without giving a reason. A decision to withdraw, or a decision not to take part, will not affect any other care that you may receive, such as through the NHS or the student support services.

What will happen to me if I take part; what will I have to do?

Sometimes we don't know which way of helping people is best. To find out, we need to compare different forms of help. Firstly, we collect information about participants before any help has started. We then put participants into groups and give each group a different form of help; in this case, either an eight-week group of mindfulness training or a booklet with advice about perfectionism. To make sure the groups are the same to start with, each participant is put into a group by chance (randomly). It is not possible for you or the researchers to choose which group you will be in. If you choose to take part, a research assistant will open an envelope which will tell us which group you will be in, and we will let you know. Participants then complete the same questionnaires and attend an interview approximately two months later and then again after another 3 months. This allows us to see whether there have been any changes before and after help has been provided and whether these changes last over several months. Because this is a pilot trial we will not be able to know for sure whether one is better than the other, but we will gather information about how helpful they both are. In order to take part, we ask that you agree to fill in three sets of questionnaires at different points in time, as well as participating in the intervention you are randomly allocated to.

Beforehand

If you decide to take part, you will be sent a questionnaire pack which will take about 20-30 minutes to complete. These are for you to complete in your own time, but assistance is available if you would like. You will also be invited to discuss the study on the telephone, at which point you will also be asked some further questions. This will last about 30-60 minutes. This interview will ask about how perfectionism affects your life. At this time, we will also ask for you to provide your GP details. Your GP will only be contacted if the clinicians feel concerned that there is a risk to your safety or the safety of other people. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form

Which form of help?

You will then be randomly assigned to either mindfulness meditation training or to receive written psycho-educational materials. You have 50% chance of receiving 8-weeks of group mindfulness-training and 50% chance of receiving written psycho-educational materials. We will write to you once we have all the participants for the study to let you know which group you have been allocated to.

Mindfulness training

What is mindfulness?

- Mindfulness means deliberately paying attention to different aspects of our experience on a moment to moment basis. This can help us to deal with difficulties and symptoms more effectively. Being mindful gives us the opportunity to respond to difficult events and situations in new ways, rather than just following old patterns.
- Being mindful means adopting a kind, compassionate, open attitude, stepping outside the mind's tendency to judge anything and everything.
- Mindfulness is a skill that we all have and can develop further.

The approach used in this group will be based on the principles of Mindfulness-Based Cognitive Therapy and Mindfulness-Based Stress Reduction. Classes last for two hours and will be held on **Mondays between 5.30 and 7.30pm at the Munro Centre at Guys Campus for eight consecutive weeks starting 14th October, 2013**. Each class involves guided meditation practice which lasts for up to 45 minutes at a time. The practices may involve lying down or sitting or doing gentle stretching. If there are any activities in which you do not wish to participate, you will be free to either do a modified form of the activity or do nothing at all. You can leave the room to take a break at any time you wish. Classes also involve discussion of your experiences of practicing mindfulness meditation but you do not have to talk in the class if you do not wish to. The classes will include information about perfectionism, and how to do things differently so that perfectionism has fewer negative effects on you, while keeping any positive effects of perfectionism.

Although group sessions can seem daunting, they can have many benefits. For example, you can develop both from active participation and from observation; you have the opportunity to give and receive immediate feedback; and you have the opportunity for support from people who are experiencing similar difficulties.

Written Psycho-educational Material

If you are randomly assigned to the Psycho-education group, you will be given a written booklet about perfectionism. This contains information about perfectionism and factors that might explain the impact that it is having on your life. It also provides advice about specific techniques to try to help participants try to overcome unhelpful aspects of their perfectionism, while holding onto any positive effects that it might have

Afterwards

Eight weeks later, you will be asked to complete another set of questionnaires and come to a second, shorter interview (that will last approximately 30 minutes). In this interview you will be asked for feedback about your experience of the mindfulness meditation training or psycho-education, including what was helpful and not so helpful. Three months after this, you will be asked to complete a final set of questionnaires.

Data and audio recording

In order to be able to analyse the data from the study, we will ask for your consent for members of the research team to have access to your questionnaire responses. All of your completed questionnaire responses will be anonymised by labelling them with a number rather than with your name. They will be stored securely at Kings College London. We will also ask your permission to audio record the assessment sessions (and group sessions if you are in the mindfulness training group), for supervision purposes and so that

we can check that the groups were being run according to the research protocol. Interviews will be recorded, subject to your permission. Recordings of interviews will be deleted upon transcription.

Other forms of help for perfectionism

We ask that you do not have any other form of help (e.g. counselling) for your perfectionism during the first eight weeks of the study, otherwise we will not be able to tell whether there has been any impact of the help that we have provided. If you take part, you can continue taking any medication. If you are taking antidepressant medication, you need to have been on a stable dose for at least three months before starting this study.

What are the alternatives for help with perfectionism?

You are free to choose not to participate in this research trial. If you do not want to participate in the trial, you will continue to be able to seek other available help.

What are the possible risks or disadvantages of taking part?

As with any form of help that focuses on psychological issues, you may sometimes feel emotionally distressed. The clinicians are trained and well experienced in running groups and will be available to be contacted between sessions.

A possible disadvantage is the inconvenience of the questionnaires and interviews. These have been kept to a minimum and will be done in a way that is as convenient for you as possible. It is also possible, though unlikely, that you might experience some emotional distress as a result of completing some of the questionnaires. Support will be available to you in this event. A second possible disadvantage is that you will be randomised to one of the two conditions (mindfulness-training or written psycho-educational materials) rather than being able to choose between them.

What are the potential benefits of taking part?

If you decide to take part then you will be offered help for negative effects of perfectionism. Whilst we expect these forms of help to be of benefit to you, we cannot guarantee this. If of interest, we can send you a copy of the final report on the research study.

What will happen if I don't want to carry on with the study?

You are able to withdraw from treatment or the study at any stage. You may decide that you would like to continue with the intervention that you are allocated to, but not complete the questionnaires and interviews. If you withdraw from treatment, with your permission, we would also like you to complete post-intervention questionnaires and attend the interview despite you not completing the group / written information. However, you will retain the right not to do this if you so choose. If you withdraw from the study, you may also request that your data is removed from this study; this will be possible until the time that the data is analysed and written up (March 2014).

What if there is a problem?

It is unlikely that this study will cause you any harm. Psychologists will be available at every stage of your involvement. If you have a concern about any aspect of this study, you should contact Kirsty James (k.m.james@bath.ac.uk) or Katharine Rimes (katharine.rimes@kcl.ac.uk). If you remain unhappy, you have the right to complain to King's College London about any aspects of the way you have been approached or treated during the course of this study.

Confidentiality – who will know that I am taking part in this study?

All information relating to you participating in this study will be securely stored, either on a password-protected computer at King's College London or the University of Bath, or locked in a filing cabinet. No completed questionnaires will be labelled using your name or any other identifiable information. Instead, each questionnaire will be labelled with a unique identification number. The only people who will have access to your data from the study will be the research team.

Ethical Approval

This study has been approved by King's College London Psychiatry, Nursing and Midwifery Research Ethics Subcommittee (PNM RESC) – Reference number: **PNM/12/13-154**.

For further information

If you have any questions or would like any further information about the study, please do not hesitate to contact Kirsty James (k.m.james@bath.ac.uk) or Dr Katharine Rimes (katharine.rimes@kcl.ac.uk).

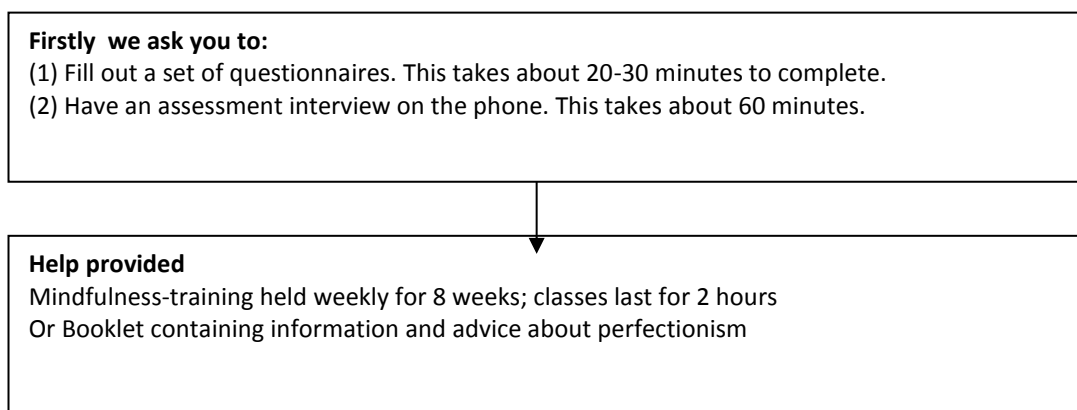
It is up to you to decide whether to take part or not. If you decide to take part you are still free to withdraw from the study at any time and without giving a reason.

Thank you for taking time to read this information pack.

Summary

- Participation is voluntary. You have the right to choose not to participate, or to stop participating in the trial at any point and without consequence.
- All the information you provide throughout the trial will be completely confidential. However, if a member of the team is given reason to believe that your health may be at risk or you may harm yourself or others, we may contact your GP or other relevant parties.
- This information sheet is for you to keep. If you decide to participate, you will also be provided with a copy of the signed consent form.
- For any further information, please contact Kirsty James or Katharine Rimes (k.m.james@bath.ac.uk / katharine.rimes@kcl.ac.uk).

The following flowchart outlines what you will be asked of you if you decide to take part:



After 8 weeks, we will ask you to:

- (1) Fill out a set of questionnaires (the same questionnaires as before)
- (2) Undertake a 30 minute telephone interview on your experiences



After a further 3-months, we will ask you to:

- (1) Fill out a final set of questionnaires (same questionnaires as before).

If this study has harmed you in any way, you can contact King's College London using the details below for further advice and information: Dr Katharine Rimes, Department of Psychology, Institute of Psychiatry, De Crespigny Park, London SE5 8AZ.

Appendix V – Main Research Project

Consent Form (Bath University)

CONSENT FORM

Title of the project: A pilot study of mindfulness training compared to psycho-education for perfectionism

Name of Researchers: Kirsty James & Dr Katharine Rimes

Name of Participant: _____

Participant Address: _____

If you wish to take part in this study, please complete this form and return it in the stamped addressed envelope provided.

Please initial each

box



1.	I confirm that I have read and understood the information sheet dated 11.06.2012 (version 1) for the above study. I have had the opportunity to consider the information, ask questions by phone and have had these answered satisfactorily	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without my medical care or legal rights being affected	
3.	I understand that data collected throughout this study may be looked at by members of the research team. I give permission for these individuals to have access to the data collected from this study, to store and to process it.	
4.	I agree that in order for me to participate in the study, members of the research team may have access to my contact details, which will be stored securely on a University of Bath server, password-protected computer or locked in a University of Bath filing cabinet.	
5.	I agree to take part in pre and post research assessment phases (questionnaires and interviews).	
6.	If I am allocated to the mindfulness training group, I consent to the interviews and group sessions being audio-taped.	
7.	I agree that data obtained from this trial can be used, in anonymous form, for publication and for a Doctorate in Clinical Psychology thesis.	
8.	I agree to taking part in the above study.	

Participant name

Date

Signature

Researcher name

Date

Signature

CONSENT FORM FOR PARTICIPANTS IN RESEARCH STUDIES

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.



Title of Study: A pilot study of mindfulness training compared to psycho-education for perfectionism

King's College Research Ethics Committee Ref: _____

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

- I understand that if I decide at any time during the research that I no longer wish to participate in this project, I can notify the researchers involved and withdraw from it immediately without giving any reason. Furthermore, I understand that I will be able to withdraw my data up to the point where it is analysed and the report written (March 2014).
- I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be handled in accordance with the terms of the UK Data Protection Act 1998.
- I confirm that I have read and understood the information sheet dated 22.08.2013 for the above study. I have had the opportunity to consider the information, ask questions by phone and have had these answered satisfactorily
- I understand that my participation is voluntary and that I am free to withdraw at any time without my medical care or legal rights being affected
- I understand that data collected in this study may be looked at by members of the research team. I give permission for these individuals to have access to the data collected from this study, to store and to process it.
- I agree that in order for me to participate in the study, members of the research team may have access to my contact details, which will be stored securely on a server at the University of Bath or King's College London, a password-protected computer or locked in a filing cabinet at the University of Bath or King's College London.
- I agree to take part in "before" and "after" assessment phases (questionnaires and interviews).
- If I am allocated to the mindfulness group, I consent to the interviews and group sessions being audio-taped.

- I agree that data obtained from this trial can be used, in anonymous form, for publication and for a Doctorate in Clinical Psychology thesis. (Please indicate if you would like a copy).
- I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me in any publications
- I agree to take part in the above study.

Participant's Statement: I -

 agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed

Date

Investigator's Statement: I _____ confirm
that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the participant.

Signed

Date

Appendix W – Main Research Project

Post-intervention Semi-structured Interview Questions

1. Can you tell me how perfectionism affected your life before you took part in this study?
2. Before you started the group / read the booklet, what were your expectations of it?
3. What did you learn from the mindfulness training / booklet?
4. Was there anything else that you found helpful about the mindfulness training / booklet?
4. Can you tell me how perfectionism has affected your life since participating in the study?
5. What did you find unhelpful about the mindfulness training / booklet?
6. Was there anything about the mindfulness training / booklet that made you feel worse?
7. How could this mindfulness training / booklet be improved?
8. Would you recommend this mindfulness training / booklet to a friend with similar issues to yourself?
9. Is there anything else that you would like to add about your experience of the booklet / training?